N23AA--

WINDSHIELD ..... 26

# **BODY**

**CONTENTS** 

# OD I

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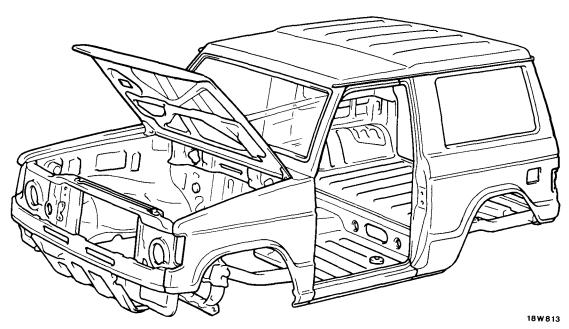
# **GENERAL INFORMATION**

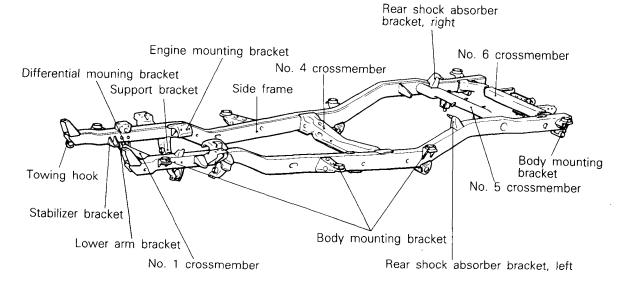
BODY

The body and frame construction is the independent division type.

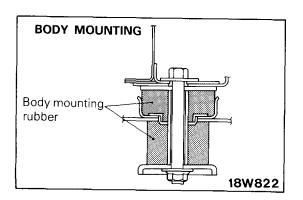
The body form is the tumble type, and the frame is the ladder type.

For body mounts, the compression type, with two body mount rubber pieces fit between the body and frame, is employed.





15W519



SHEET METAL N23BAAC

The instrument panel is made of sheet metal to which urethane padding is attached.

The adhesive-type of headlining is used.

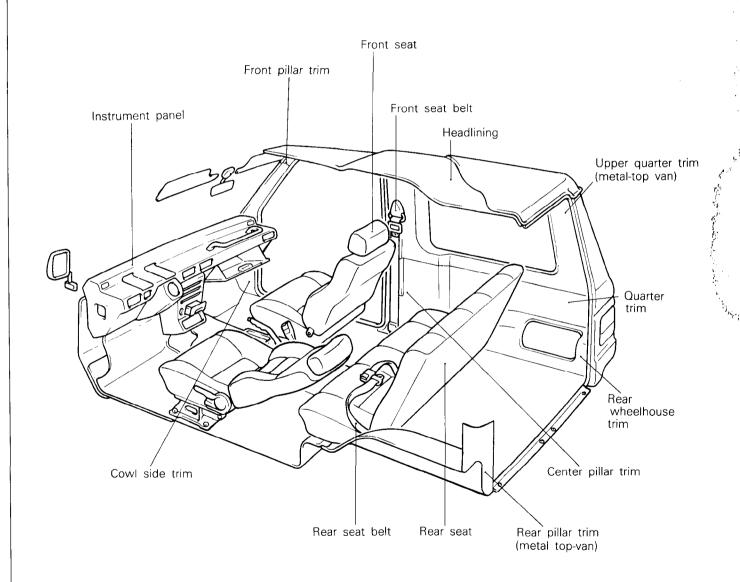
The injection-type of trim is used.

Separate, low-back front seats are equipped; suspension seats are available as an option.

For the metal-top van, the rear seat is a front-facing seat for two passengers.

The front seat belts are 3-point seat belts with E.L.R.

The rear seat belts for the metal-top van are 2-point retractable seat belts.



19W685

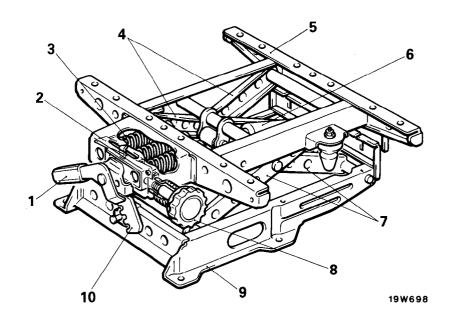
## SUSPENSION SEAT

The suspension seat has a special suspension mechanism in the base frame and is installed on the driver's seat side.

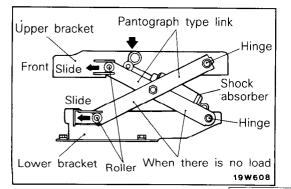
When the vehicle travels on an uneven ground surface or rough road, the seat absorbs the body vibration the vehicle takes from the road surface, reducing driver fatigue and assuring a more comfortable ride.

The seat offers the following features:

- (1) Pantograph type link mechanism
- (2) Optimum combination of coil spring and shock absorber
- (3) More comfortable ride by adjust body weight meter to driver's weight
- (4) Fixed position of seat can be adjusted in three height levels The components of the suspension seat are as follows:



- 1. Lock lever
- 2. Guide B
- 3. Coil spring
- 4. Link
- 5. Upper bracket
- 6. Shock absorber
- 7. Link
- 8. Handle
- 9. Lower bracket
- 10. Guide A

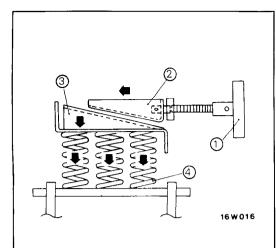


#### **OPERATION**

## Suspension Mechanism

The suspension mechanism is constructed as shown.

The lower and upper brackets of the link are coupled by hinges at one end and by rollers at the other, allowing forward and backward sliding. If a force in the direction of the arrow is exerted to the link (pantograph), the upper bracket is moved downward, so the shock absorbers hinge-coupled to the lower and upper brackets absorb vibration.



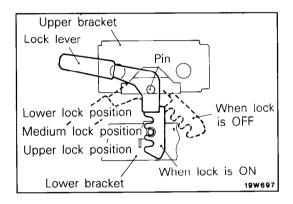
#### NOTE

The illustration above shows the top view of the body weight adjusting mechanism. The shows the working of each part when the spring force is increased.

## **Body Weight Adjusting Mechanism**

The configuration of the body weight adjusting mechanism of the suspension seat is as shown in the illustration.

When the handle (1) is turned in the clockwise direction, guide A (2) moves along the slope of guide B (3), pushing guide B (3) as it moves. The coil spring (4) is thus compressed, increasing the spring force and resulting in a harder suspension. When the handle is turned in the conterclockwise direction, the spring force is weakened, resulting in a softer suspension.



## Suspension Lock Mechanism

The suspension lock mechanism is constructed as shown in the illustration at left. The seat lock position can be selected in three levels by a lock lever.

# **SPECIFICATIONS**

## **GENERAL SPECIFICATIONS**

N23CA--

Items	Specifications
Hood	
Туре	Rear hinged, front opening type
Front door	
Construction	Front hinged, sash construction
Regulator system	X-arm type
Locking system	Pin-fork type
Back door	
Construction	Right hinged, sash construction
Locking system	Pin-fork type
Glass installation method	
Windshield	Weatherstrip type
Quarter window	Weatherstrip type
Front door window	Weatherstrip type
Back door window	Weatherstrip type
Glass thickness mm (in.)	
Windshield	5.7 (.22)
Quarter window glass	4.0 (.16)
Front door glass	4.0 (.16)
Front door glass  Back door window glass	4.0 (.16)
<ul> <li>Ventilator window glass</li> </ul>	4.0 (.16)
Frame Type	Ladder type
Sectional form	Box type
Súspension seat	
Suspension mechanism	Coil spring type with shock absorber
Up-and-down movement stroke mm (in.)	70 (2.76)
Body weight adjustment kg (lbs.)	50–100 (110.2–220.5)
Seat height adjustment	3 levels

## **SERVICE SPECIFICATIONS**

N23CB--

Items	Specifications
Standard values	
Front door glass holder mounting position mm (in.)	
Distance between the glass holder (A) and (B)	466.5–467.5 (18.367–18.406)
Distance between the glass holder (B) and the glass edge	76.5–77.5 (3.012–3.051)
Door outside handle play mm (in.)	5–10 (.20–.40)
Door inside handle play mm (in.)	4–10 (.16–.40)

# **TORQUE SPECIFICATIONS**

23CC--

(tem	Nm	ft.lbs.
Body to frame	28–32	20–23
Hood hook to hood	4.0-6.0	2.9–4.3
Hood latch to body	4.0-6.0	2.9-4.3
Hood latch release cable	3.5-4.0	2.5–2.9
Under skid plate to frame	18–25	13–18
Under cover installation bolts	10–13	7–9
Snow-protection under cover installation bolts	10–13	7–9
Transfer case protector to No. 2 crossmember	18–25	13–18
Transfer case protector to frame	10–13	7–9
Cross shaft protector installation bolts	10–13	7–9
Front door hinge to door panel	17–26	12–19
Front door hinge to body	35–55	25–40
Ventilator window assembly to door panel	6	4.3
Window regulator to door panel	6	4.3
Door lower sash to door panel	6	4.3
Back door hinge to body	35–55	25–40
Spare tire bracket to back door	8–10	6–7
Air duct to body	4–6	3–4
Seat anchor bolts		65-10
Head marked 8	9–14	6.5–10
Head marked 10	35–55	25–40
Front seat cushion to seat adjuster	9–14	6.5–10
Front seatback to seat cushion (Reclining adjuster side)	45–60	33–43
Front seatback to seat cushion	10–15	7–11
Rear seat leg bracket to body	9–14	6.5–10
Rear seatback to seat cushion	45–60	33–43
All seat belt tightening bolts	35–55	25–40

## LUBRICANTS

23CD-

Items	Specified lubricants	Quantity
Back door hinges	Multipurpose grease SAE J310, NLGI No. 3	As required
Sliding parts of front seat adjuster	Multipurpose grease SAE J310, NLGI No. 2	As required
Sliding parts of rear seat leg bracket, rear seat stopper striker	Multipurpose grease SAE J310, NLGI No. 2	As required

## **SEALANTS AND ADHESIVES**

23CF-

Items	Specified sealants and adhesives	Quantity
Hood rear weatherstrip	3M ART Part No. 8513 or equivalent	As required
Front fender and front shield	3M ART Part No. 8531 or No. 8646, or equivalent	As required
Front fender and splash shield	3M ART Part No. 8626 or 3M Adhesive EC-5310, or equivalent	As required
Windshield weatherstrip and windshield glass	3M ART Part No. 8001 or No. 8011, or equivalent	As required
Windshield weatherstrip and body flange	3M ART Part No. 8626 or 3M Adhesive EC-5310, or equivalent	As required
Quarter window weatherstrip and quarter window rear glass	3M ART Part No. 8001 or No. 8011, or equivalent	As required
Quarter window weatherstrip and body flange	3M ART Part No. 8001 or No. 8011, or equivalent	As required
Back door window weatherstrip and back door window glass	3M ART Part No. 8001 or No. 8011, or equivalent	As required
Waterproof film	3M ART Part No. 8626 or 3M Adhesive EC-5310, or equivalent	As required
Door window runchannel	3M Adhesive EC-870 or equivalent	As required
Door window runchannel and ventilator sash assembly	3M ART Part No. 8080 or 3M Adhesive EC-1368, or equivalent	As required
Ventilator window glass, ventilator sash and ventilator window pad	3M AMT Part No. 8001 or No. 8011, or equivalent	As required
Ventilator sash assembly and ventilator window weatherstrip	3M ART Part No. 8080 or 3M Adhesive EC-1368, or equivalent	As required
Ventilator sash assembly and ventilator window weatherstrip	3M AMT Part No. 8001 or No. 8011, or equivalent	As required
Back door opening weatherstrip and back door	3M ART Part No. 8001 or No. 8011, or equivalent	As required
Waterproof pad and fender	3M ART Part No. 8001 or No. 8011, or equivalent	As required
Headlining and roof panel	3M ART Part No. 8080 or 3M Adhesive EC-1368, or equivalent	As required

# **SPECIAL TOOLS**

23DA--

Tool (Number and name)	Use	Tool (Number and name)	Use
MB990900-01 Door adjusting wrench	Adjustment of door fit	MB990449 Windshield moulding remover	Removal of windshield moulding Removal of back door lock switch Removal of cowl side trim Removal of upper quarter trim

# **TROUBLESHOOTING**

## FRONT DOOR N23EAAC

Symptom	Probable cause	Remedy	Reference page
Door glass fails to	Dismount window glass regulator	Adjust	_
operate up and down	Detached sash	Attach	_
	Broken sash	Replace	_
	Collapsed sash	Repair or replace	_
	Collapsed window glass regulator arm	Repair or replace	-
	Broken window glass regulator	Replace	_
Door glass operates up and down hardly	Improper window glass position	Adjust	23-16
	Collapsed sash	Repair or replace	_
	Collapsed window regulator arm	Repair or replace	_
	Broken window regulator handle	Replace	_

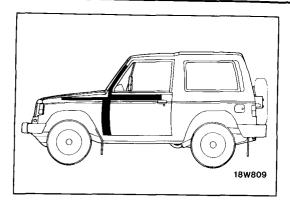
## **BACK DOOR**

Symptom	Probable cause	Remedy	Reference 🆠 page
Back door is "hard" when opened/closed; abnormal noise is heard from hinges	Insufficient grease on hinges	Apply chassis grease	23-48

## **WIND NOISES**

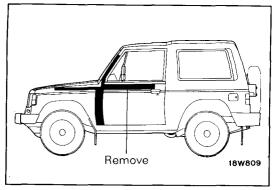
Symptom	Probable cause	Remedy	Reference page
Wind noise from	Insufficient weatherstrip holding force	Adjust the door installation	23-15
around the door	Weatherstrip improperly installed, or deteriorated	Repair or replace	23-45
	Door fails closing	Adjust	<u> </u>
	Improper door position	Adjust	23-15
	Uneven clearance between door glass and runchannel	Adjust	_
Deformation of the door		Repair or replace	_
Wind noise from back	Insufficient weatherstrip holding force	Adjust the back door installation	23-17
door	Weatherstrip improperly installed, or deteriorated	Repair or replace	23-47
	Uneven clearance between the body and back door	Adjust	23-17
	Deformation of the back door	Repair or replace	_

CTD Davisis

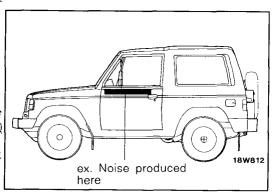


### HOW TO LOCATE WIND NOISES

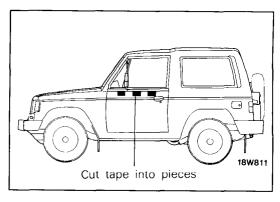
- (1) Attach cloth tape to every place which might conceivably be the source of wind noise, such as panel seams, projections, moulding seams, glass and body seams, etc.
- (2) Then make a road test in order to determine that the places not covered by tape are not sources of wind noise.



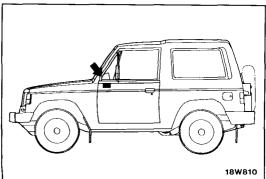
(3) Then remove the strips of tape one by one, making a road test after each is removed, until a wind noise source is discovered.



- (4) When such a place is found, cover it again and continue with the procedure so as to determine if there are any other noise sources.
- (5) If no others are found, the last remaining tape is the only source.



(6) Cut the remaining piece of tape into smaller pieces, attach it again as it was before, and then remove the pieces one by one in the same way so as to narrow down the source.



- (7) Check to confirm that wind noise occurs when the last remaining tape is removed, and that noise does not occur when it is re-attached.
- (8) When the source(s) of the wind noise is finally located, attach butyl tape, body sealer or similar material to obstruct this source as much as possible.

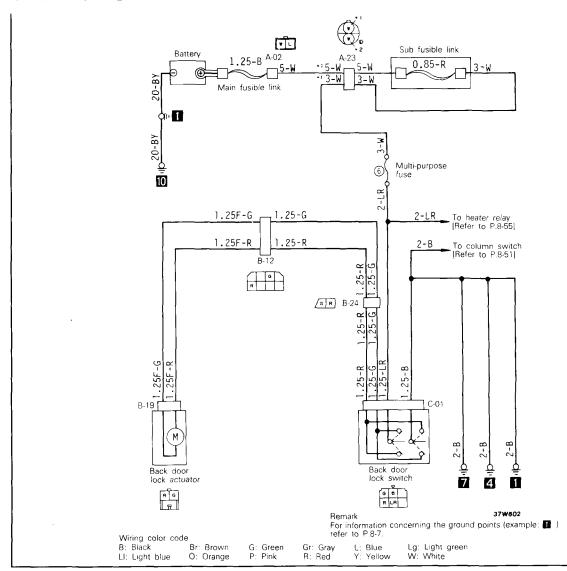
## **BACK DOOR LOCKING SYSTEM**

Inspection items Symptom	Fuse No. 6	Poor connector connection	Break in wiring harness	Back door lock switch	Back door lock actuator
When the switch is operated, the back door fails to unlock or lock.	1	2	(5)		4
The back door is locked but cannot be unlocked.				①	2
The back door is unlocked but cannot be locked.				①	2

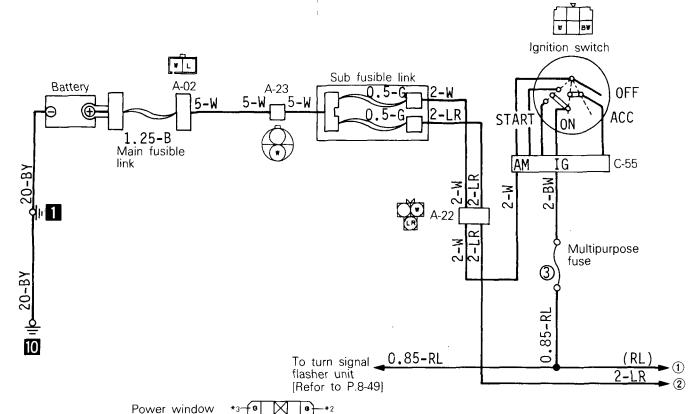
NOTE

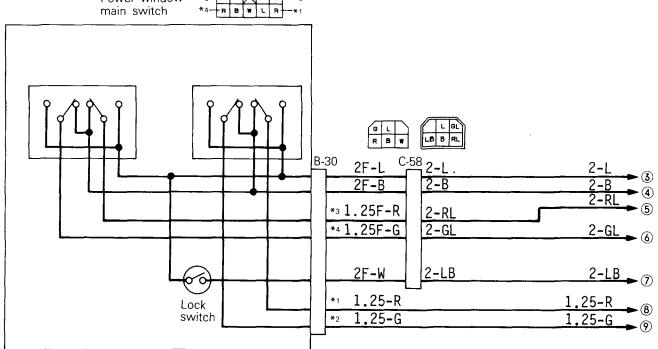
Number in circle indicates inspection sequence.

## **CIRCUIT DIAGRAM**



# POWER WINDOW CIRCUIT DIAGRAM

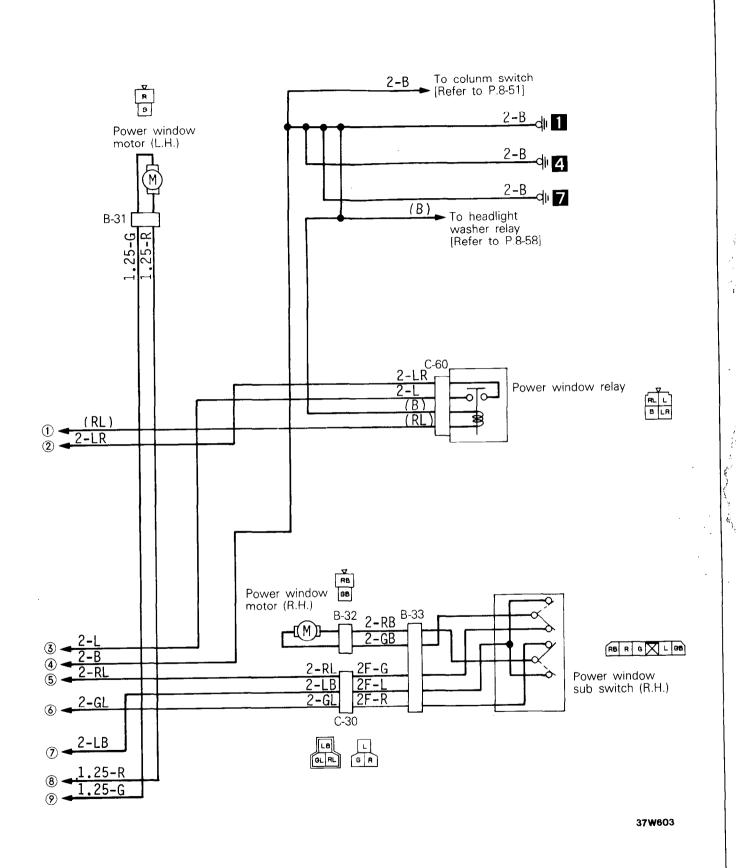




#### Remarks

(1) For information concerning the ground points (example: □), refer to P.8-7.
(2) The symbols ⊕, ②, etc. indicate that the wiring is

(2) The symbols ①, ②, etc. indicate that the wiring is connected (using the same numerical symbol) to the facing page. (In other words, ① on the right page is connected to ① on the left page.)



Wiring color code B: Black LI: Light blue

Br: Brown O: Orange G: Green P: Pink

Gr: Gray R: Red

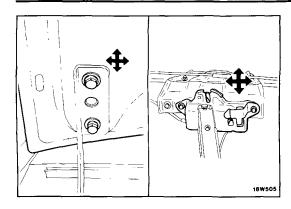
L: Blue Y: Yellow

Lg: Light green W: White

**POWER WINDOWS** 23EAAD

Inspection items						In			nd glass
Symptom	Fuse No. 3	Power window relay	Main switch	Main switch lock	Sub switch	Power window motor	Poor connector connection	Break in wiring harness	Improper adjustment of regulator and glass
None of the door windows can be operated.	1	3	4				2	6	
The front door windows cannot be operated by using the main switches			1			2	3		
The door windows can be operated by using the main switches, but cannot be operated by using the sub switches.				3	2		1		
The door windows can be operated (by using the sub switches) even though the lock switch is at "ON".				1					
The door windows do not operate smoothly.									1

Number in circle indicates inspection sequence.



# SERVICE ADJUSTMENT PROCEDURES

ADJUSTMENT OF HOOD FIT

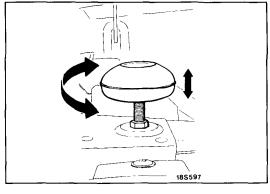
N23FAAC

- 1. Adjust the fit of hood with the hood adjusting bolts, hood latch adjusting bolts and hood bumper while they are installed. Loosen the hood adjusting bolts and adjust the hood laterally with reference to the hood latch.
- 2. After lateral adjustment of hood, adjust the hood vertically with the hood adjusting bolts and hood latch adjusting

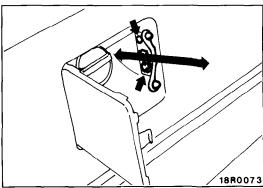
Make sure that the hood hook is properly engaged with the hood latch.

#### NOTE

Apply chassis grease to the sliding portion, the rotating portion and the spring of the hood latch.

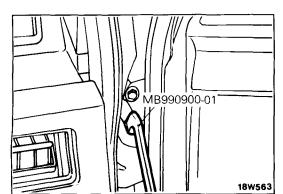


3. Turn the hood bumper and adjust the vertical position of the hood by adjusting the hood bumper either up or down.



# ADJUSTMENT OF FUEL FILLER DOOR HOOK

Loosen the fuel filler door hook mounting screws and move the fuel filler door hook to the left and right so that the door is flush with the body.

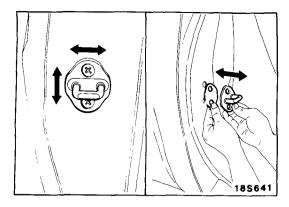


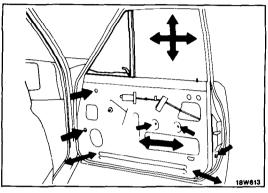
## ADJUSTMENT OF DOOR INSTALLATION

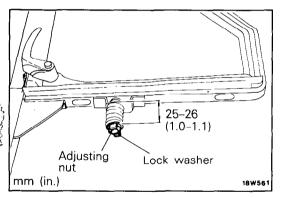
1. Use the special tool to loosen the hinge mounting bolts on the body side, and then adjust so that the clearance around the door is uniform on all sides.

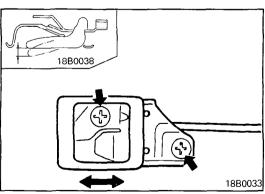
#### Caution

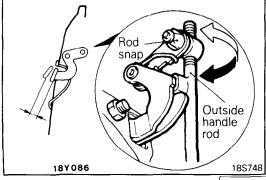
Attach protection tape to the fender edges near the place where the hinge is installed.











- 2. At the facing surface of the front fender and door panel, loosen the installation bolts at the door side, and then adjust by increasing or decreasing the number of shims.
- 3. At the facing surfaces of the door and rear pillar outer panel, adjust by loosening the striker installation screws.
- 4. Adjust the engagement of the striker and door latch by increasing or decreasing the number of striker shims, and/or by moving the striker.

## ADJUSTMENT OF DOOR GLASS

N23FFAB

- 1. Remove the door trim and waterproof film. (Refer to P.23-33.)
- Raise the door glass fully, and then adjust the following items so that the door glass fits evenly into the window glass runchannel all the way around.

Loosen the screws and/or bolts securing the window and rear lower sash.

Move the window, rear lower sash and the sub roller guide (vehicles without ventilator window) of the window regulator to adjust the door glass position.

## ADJUSTMENT OF VENTILATOR WINDOW N23FJAA

- 1. Remove the door trim and waterproof film. (Refer to P.23-33.)
- 2. Remove the ventilator window. (Refer to P.23-35.)
- Adjust the ventilator window by turning the adjusting nut so that the ventilator window can be operated smoothly.

#### NOTE

Fix the adjusting nut by bending the lock washer after the adjustment.

## ADJUSTMENT OF INSIDE HANDLE

N23FGAB

N23FHAB

- 1. Remove the door trim and waterproof film. (Refer to P.23-33.)
- 2. Move the mounting position of the inside handle longitudinally in order to adjust the play of the inside handle.

Standard value: 4-10 mm (.16-.40 in.)

# ADJUSTMENT OF OUTSIDE HANDLE FRONT DOOR

- 1. Remove the door trim and waterproof film. (Refer to P.23-33.)
- 2. Disconnect the outside handle from the outside handle rod, and turn it right to left to adjust the outside handle play.

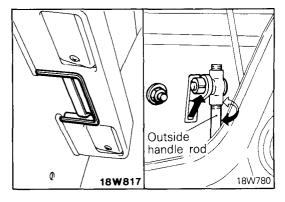
#### Caution

The rod snap must be replaced.

Standard value : 5-10 mm (.20-.40 in.)

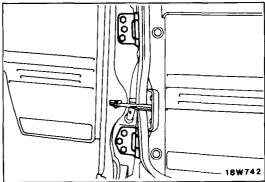
### **BACK DOOR**

1. Remove the back door trim and waterproof film. (Refer to P.23-49.)



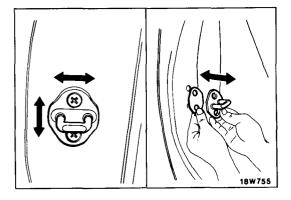
2. Disconnect the outside handle from the outside handle rod, and turn it right to left to adjust the outside handle play.

Standard value : 5-10 mm (.20-.40 in.)



## ADJUSTMENT OF BACK DOOR INSTALLATION

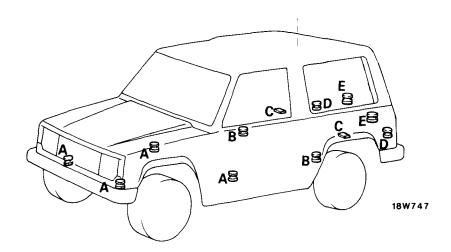
- (1) To loosen the hinge mounting bolts on the body side, and then adjust so that the clearance around the back door is uniform on all sides.
- (2) At the facing surface of the right side quarter panel and the back door, adjust by loosening the installation bolts.



- (3) At the facing surface of the left side quarter panel and back door, adjust by loosening the striker installation screws.
- (4) Adjust the engagement of the striker and the back door latch by increasing or decreasing the number of striker shims, and/or by moving the striker.

# **BODY MOUNTING**REMOVAL AND INSTALLATION

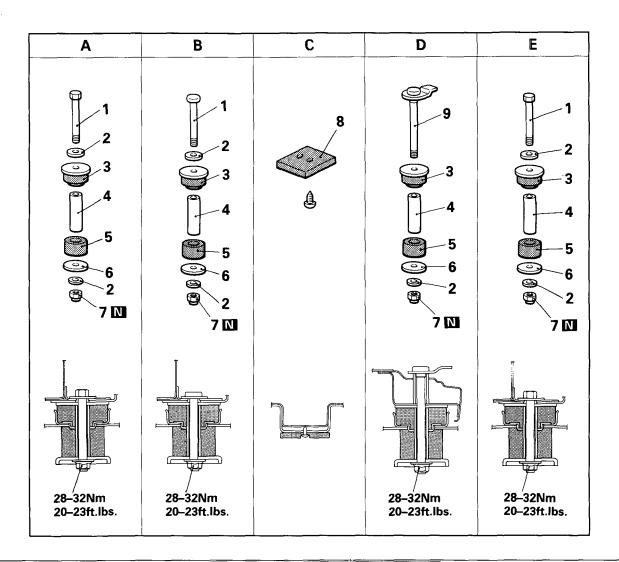
N23GAAA



- 1. Special bolt
- 2. Plain washer
- 3. Body mounting rubber (A)
- 4. Spacer
- 5. Body mounting rubber (B)
- 6. Washer
- 7. Self locking nut
- 8. Body shim
- 9. Mounting bolt

NOTE

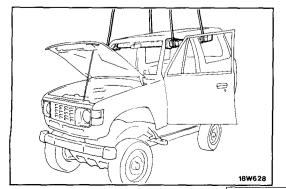
N :Non-reusable parts



STR Pavision

### **REMOVAL**

- (1) Remove or disconnect the following parts:
  - Air filter
  - Accelerator cable
  - Vapor hose
  - Heater hoses
  - Brake booster vacuum hose
  - Starter motor wiring harness
  - Alternator wiring harness
  - Engine ground (on body side)
  - Steering shaft joint
  - Fuel cut solenoid valve connector
  - E.S.S. solenoid valve connector
  - High-tension cable
  - Water temperature gage connector
  - Power steering pump
  - Oil pressure switch harness
  - Transmission oil cooler
  - Radiator assembly
  - Oxygen sensor connector
  - Hydraulic clutch hoses
  - Brake pipes
  - Speedometer cable (transmission side)
  - Carburetor control wiring harness
  - Air temperature sensor connector
  - Water temperature sensor connector
  - Backup light switch connector
  - 4WD indicator light switch connector
  - Pulse generator connector
  - Fuel pipe
  - Filler hose protector
  - 2-way valve
  - Rear combination light connector
  - Filler neck
  - Transmission gearshift lever
  - Transfer gearshift lever
  - Parking brake cable
  - Front and rear seats
  - Door opening trim



(2) After removing the body mounting bolts and the body shims, insert wood blocks into the body and gently lift with a crane.

#### Caution

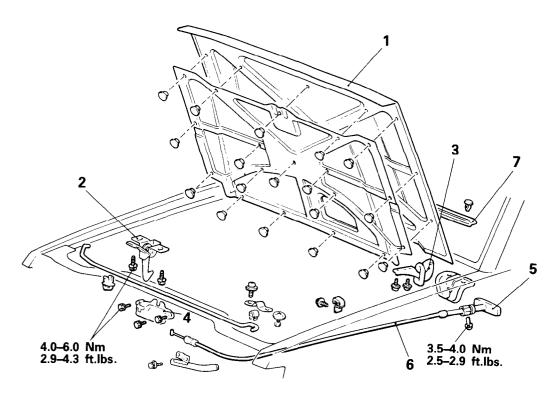
Hoist the body carefully after assuring that all the connections between body and frame and engine are separated.

Sling wires with a suitable bar or frame used and with good protection made by fitting coverings at necessary points.

## HOOD

# REMOVAL AND INSTALLATION

N23HAAC



18W731

#### Hood removal steps

- **◆◆** 1. Hood
- ◆ 2. Hood hook
  - 3. Hood hinge

#### Hood latch release cable removal steps

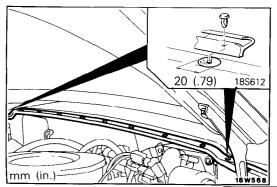
- ◆ 4. Hood latch
  - 5. Hood latch release handle
  - 6. Hood latch release cable

### Hood rear weatherstrip removal

→ 7. Hood rear weatherstrip

#### NOTE

- (1) Reverse the removal procedures to reinstall.
  - (2) ▶ ← : Refer to "Service Points of Installation".

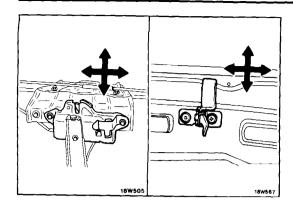


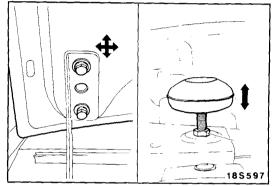
## SERVICE POINTS OF INSTALLATION

## 7. APPLICATION OF SEALANT TO HOOD REAR WEATHER-STRIP

Apply the specified sealant to and around the two hood rear weatherstrip attaching holes at the right and left ends of the front deck.

Specified sealant: 3M ART Part No. 8513 or equivalent





## 4. ADJUSTMENT OF HOOD LATCH /2. HOOD HOOK

- (1) Loosen the hood latch and hood catch stay attaching bolts.
- (2) Adjust the position of the hood latch and hood hook to align the lock with the hook.

#### NOTE

Apply chassis grease to the sliding portion, the rotating portion of the hood hook and hood lach.

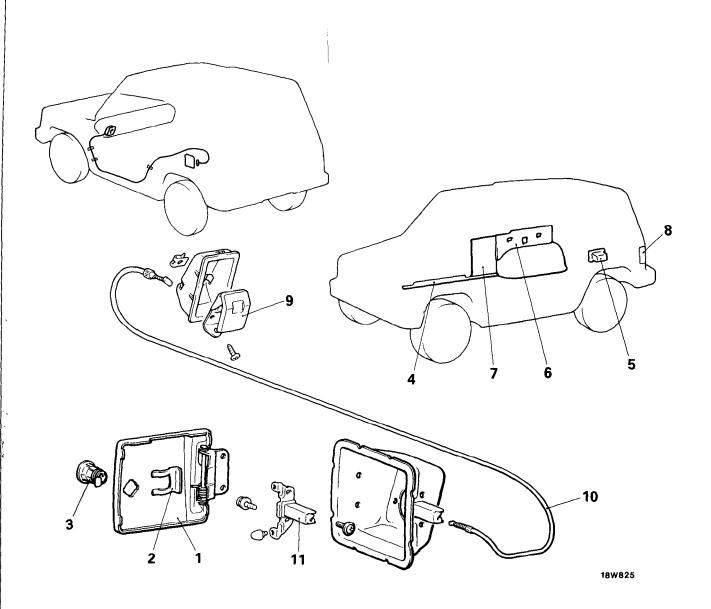
### 1. ADJUSTMENT OF HOOD

- (1) Adjust the longitudinal and lateral positions of the hood by utilizing the oblong holes in the hinge.
- (2) Adjust the vertical position of the hood by adjusting the hood bumper either up or down.

## **FUEL FILLER DOOR**

## REMOVAL AND INSTALLATION

N23JAAD



## Fuel filler door panel

→ 1. Fuel filler door panel

#### Lock cylinder assembly removal steps

- 2. Cylinder lock retainer
- 3. Lock cylinder assembly

#### Fuel filler door lock release cable removal steps

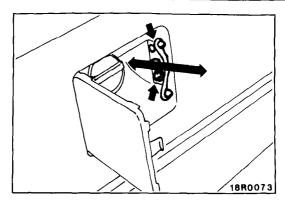
- 4. Front scuff plate (L.H.)
- 5. Ashtray (L.H.) [metal top-van]
- 6. Quarter trim (L.H.)
- 7. Center pillar trim
- 8. Rear combination light
- 9. Lock release handle
- 10. Fuel filler door lock release cable

## Fuel filler door hook removal steps

- 8. Rear combination light
- 10. Fuel filler door lock release cable connection
- 11. Fuel filler door hook

### NOTE

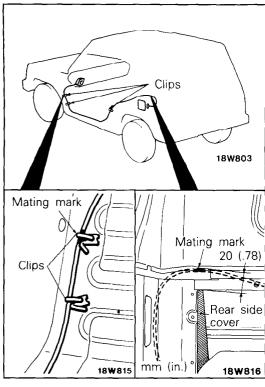
- (1) Reverse the removal procedures to reinstall.(2) ▶♠: Refer to "Service Points of Installation".



## SERVICE POINTS OF INSTALLATION

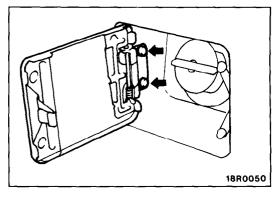
## 11. ADJUSTMENT OF FUEL FILLER DOOR HOOK

Loosen the fuel filler door hook mounting screws and move the fuel filler door hook to the left and right so that the door is flush with the body.



# 10. INSTALLATION OF FUEL FILLER DOOR LOCK RELEASE CABLE

Install so that the installation position mating mark (yellow paint) on the release cable is aligned with the position shown in the figure.



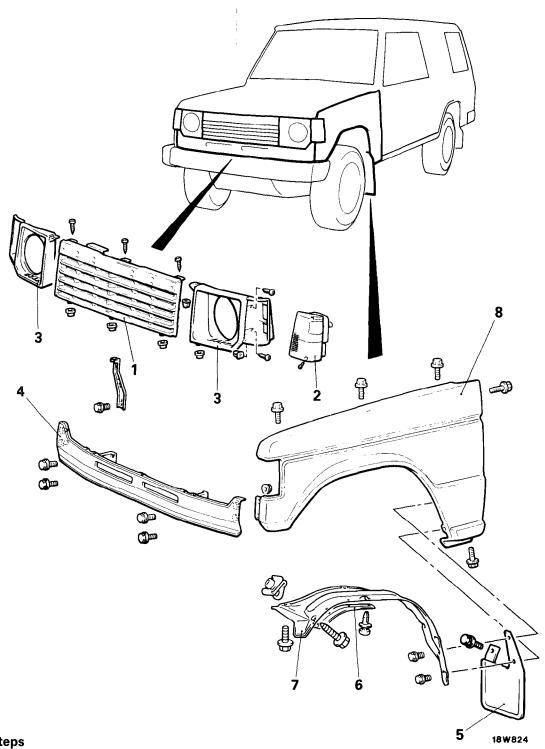
#### 1. ADJUSTMENT OF FUEL FILLER DOOR PANEL

Loosen the fuel filler door mounting screws and adjust so that the upper and lower clearances are equal and the door is flush with the body.

# **FENDERS**

# REMOVAL AND INSTALLATION

N23KAAE

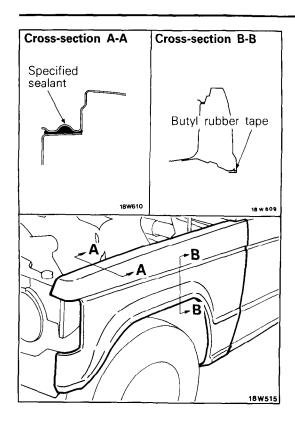


## Removal steps

- 1. Radiator grille
- 2. Front combination light
- 3. Headlight bezel
- 4. Grille filler panel
- 5. Front mud guard
- 6. Partial wheel lip
- 7. Splash shield
- 8. Front fender

### NOTE

- Reverse the removal procedures to reinstall.
   A = : Refer to "Service Points of Installation".



## **SERVICE POINTS OF INSTALLATION**

## 8. INSTALLATION OF FRONT FENDER

(1) Apply the specified sealant fully to the top part of fender up to the ends.

Specified sealant: 3M ART No. 8531 or No. 8646, or equivalent

(2) Apply butyl rubber tape to the flange part of the fender when installing the splash shield.

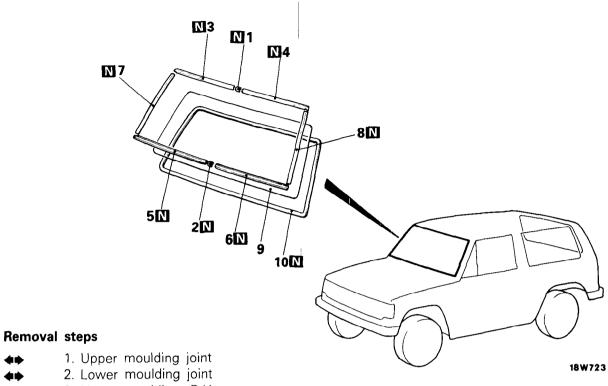
Specified adhesive: 3M ART Part No. 8626 or 3M Adhesive EC-5310, or equivalent

(3) Fasten the fender temporarily in position, make sure that clearance is uniform at all points, and then fasten completely.

## WINDSHIELD

## REMOVAL AND INSTALLATION

N23LBAD



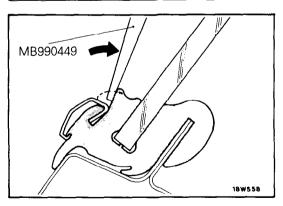
- 3. Upper moulding, R.H.
- 4. Upper moulding, L.H.
  - 5. Lower moulding, R.H.
- 6. Lower moulding, L.H.
- 7. Side moulding, R.H.
- 8. Side moulding, L.H.
- 9. Windshield
- 10. Windshield weatherstrip

#### NOTE

- Reverse the removal procedures to reinstall.

  •• Refer to "Service Points of Removal".

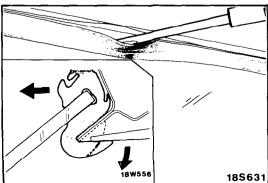
  •• Refer to "Service Points of Installation".
- (4) N: Non-reusable parts



## SERVICE POINTS OF REMOVAL

## 1. REMOVAL OF UPPER MOULDING JOINT/2. LOWER MOULDING JOINT/3. TO 8. MOULDINGS

On vehicles equipped with mouldings, remove the moulding with the weatherstrip straightened with a special tool after sliding the moulding joint.

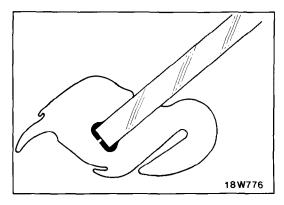


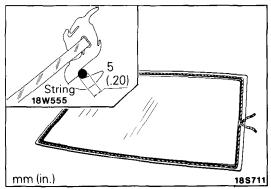
### 9. REMOVAL OF WINDSHIELD/10. WINDSHIELD WEATH-**ERSTRIP**

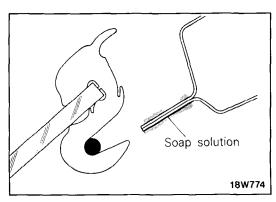
Push the windshield out from the inside of the cabin with the lip of the weatherstrip straightened along the entire periphery with a screwdriver.

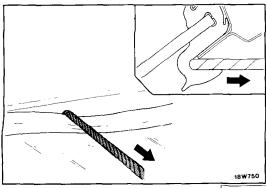
## **INSPECTION**

• Check the body flange for deformation.









## SERVICE POINTS OF INSTALLATION

# 10. INSTALLATION OF WINDSHIELD WEATHERSTRIP/9. WINDSHIELD

(1) Fill the weatherstrip with the specified adhesive and fit it to the windshield.

Specified adhesive: 3M ART Part No. 8001 or No. 8011, or equivalent

(2) Set round strings in the weatherstrip groove.

#### NOTE

Make certain that the strings overlap each other at both ends.

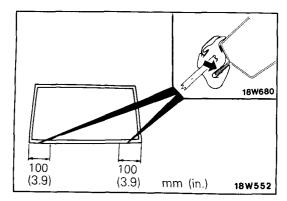
- (3) Apply soap solution to the entire surface of the body flange.
- (4) Place the windshield in position from outside with the strings placed inside the cabin.
- (5) With the aid of an assistant to push the windshield from outside, slowly pull one end of the string at right angles to the windshield and fit the lips of the weatherstrip correctly on the windshield flange.

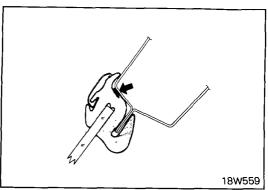
### NOTE

Pull the strings, working from both sides of the windshield toward the center and pushing from the outside of the glass.

#### Caution

Press lightly to hold the glass against the body flange surface.





(6) Apply specified adhesive between the weatherstrip and the body flange at the locations indicated in the illustration.

Specified adhesive: 3M ART Part No. 8626 or 3M Adhesive EC-5310, or equivalent

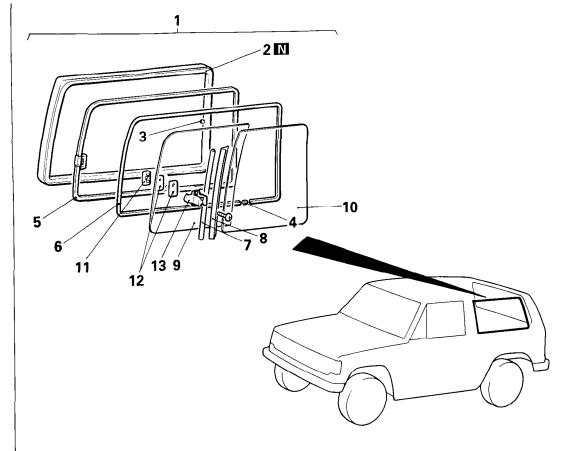
(7) Apply an ample amount of the specified adhesive all around the weatherstrip between it and the body flange.

Specified adhesive: 3M ART Part No. 8001 or No. 8011, or equivalent

# **QUARTER WINDOW GLASS**

## REMOVAL AND INSTALLATION

N23LEBB



18W773

#### Removal steps

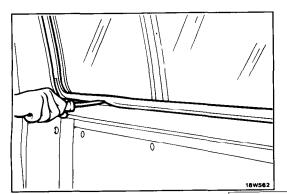
- 1. Glass and weatherstrip assembly (parts of step No. 2-10)
  - 2. Quarter window weatherstrip
  - 3. Stopper
  - 4. Stopper
  - 5. Quarter window sash
  - 6. Quarter window runchannel
  - 7. Holder
  - 8. Rubber seal
- 9. Quarter window front glass
- 10. Quarter window rear glass

#### Slide glass lock removal steps

- 11. Connector
- 12. Packing
- 13. Slide glass lock

#### NOTE

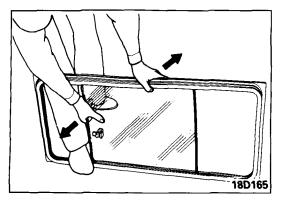
- (1) Reverse the removal procedures to reinstall.
  (2) ♠ : Refer to "Service Points of Removal".
  (3) ♠ : Refer to "Service Points of Installation".
  (4) N : Non-reusable parts



## SERVICE POINTS OF REMOVAL

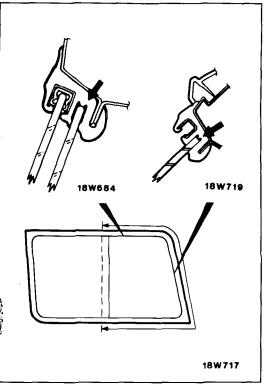
## 1. REMOVAL OF GLASS AND WEATHERSTRIP ASSEMBLY

With the glass in position, push the quarter window assembly outward while raising the lip of the weatherstrip along the periphery.



9. REMOVAL OF QUARTER WINDOW FRONT GLASS/10. QUARTER WINDOW REAR GLASS

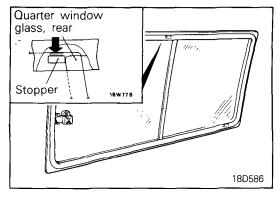
Move the quarter window glass to the middle position and remove it by opening the weatherstrip up and down.



### SERVICE POINTS OF INSTALLATION

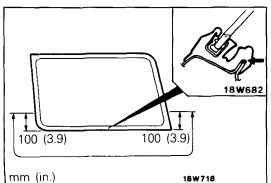
- 1. APPLICATION OF ADHESIVE TO GLASS AND WEATH-ERSTRIP ASSEMBLY
  - (1) Apply the specified adhesive to the weatherstrip at the location indicated in the illustration.

Specified adhesive: 3M ART Part No. 8001 or No. 8011, or equivalent



(2) After the quarter window rear glass has been installed, install the stopper by applying the specified adhesive.

Specified adhesive : 3M Adhesive EC-870 or equivalent



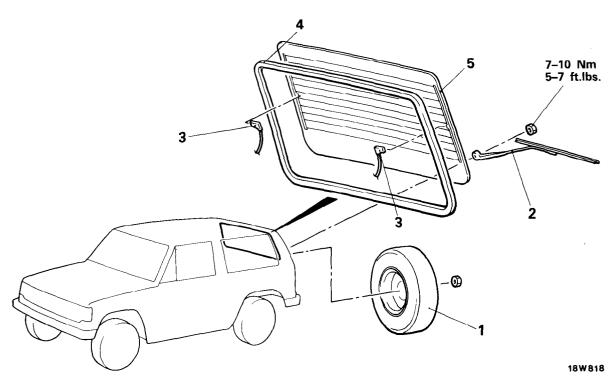
(3) Apply the specified adhesive between the weatherstrip and the body flange at the location indicated in the illustration.

Specified adhesive: 3M ART Part No. 8001 or No. 8011, or equivalent

## **BACK DOOR WINDOW GLASS**

## **REMOVAL AND INSTALLATION**

N23LDAD

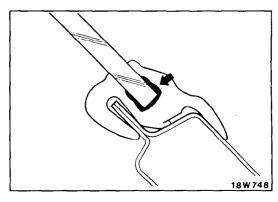


#### Removal steps

- 1 Spare tire
- 2 Wiper arm and blade assembly (Vehicles with a rear wiper)
- 3 Rear defogger terminal (Vehicles with a rear defogger)
- ◆ 4 Back door window weatherstrip
  - 5 Back door window glass

#### NOTE

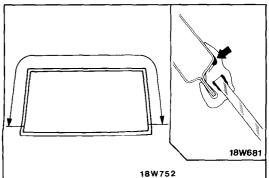
- (1) Reverse the removal procedures to reinstall.
- (2) ▶ ← : Refer to "Service Points of Installation".



### **SERVICE POINTS OF INSTALLATION**

- 4. APPLICATION OF ADHESIVE TO BACK DOOR WINDOW WEATHERSTRIP
  - (1) Apply the specified adhesive to the weatherstrip.

Specified adhesive: 3M ART Part No. 8001 or No. 8011, or equivalent



(2) As shown in the figure, attach butyl tape between the weatherstrip and the body flange.

## **DOOR ASSEMBLY**

## REMOVAL AND INSTALLATION

N23MAAF

Post-installation Operation Adjustment of Door Installation (Réfer to 23-15)

#### Removal steps

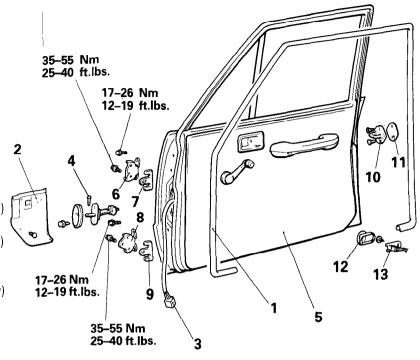
- 1. Door opening trim (Vehicles with a Power Window)
- 2. Cowl side trim (Vehicles with a Power Window)
- 3. Connection of door wiring harness connector (Vehicles with a Power Window)
- 4. Spring pin
- 5. Door
- 6. Door upper hinge
  - 7. Door upper hinge shim
- 8. Door lower hinge
  - 9. Door lower hinge shim

#### Striker removal steps

- 10. Striker
- 11. Striker shim

## Door switch removal steps

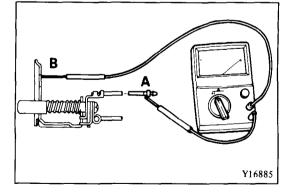
- 12. Door switch cap
- 13. Door switch

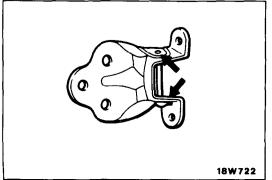


18W792

#### NOTE

- (1) Reverse the removal procedures to reinstall.
  (2) ★★: Refer to "Service Points of Installation".





### INSPECTION

Check the door hinges for cracks, damage or abnormal noise.

## **DOOR SWITCH**

Operate the switch, and check the continuity between the terminals.

Switch Test probe	А	В
Release	0	
Push		

### NOTE

O-O indicates that there is continuity between the terminals.

#### SERVICE POINTS OF INSTALLATION

8. APPLICATION OF GREASE TO DOOR LOWER HINGE/6. **DOOR UPPER HINGE** 

Apply the chassis grease to the sliding part of the door hinges.

## DOOR TRIM AND WATERPROOF FILM

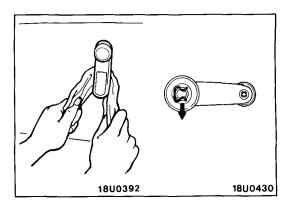
## REMOVAL AND INSTALLATION (Vehicles without a Power Window)

N23MBAE

## Removal steps

- 1. Clip
- 2. Regulator handle
- 3. Escutcheon
- 4. Armrest
- 5. Inside handle cover
- 6. Door trim
- 7. Trim clip
- 8. Door upper trim
- 9. Waterproof film

- (1) Reverse the removal procedures to reinstall.
  (2) Refer to "Service Points of Removal".
  (3) Refer to "Service Points of Installation".
- Clipping position



## **SERVICE POINTS OF REMOVAL**

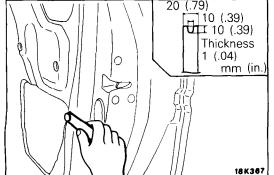
### 1. REMOVAL OF CLIP

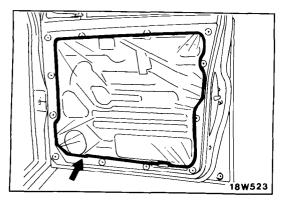
Remove the clip by using a rag, and then remove the regulator handle.

18W 784

## 7. REMOVAL OF TRIM CLIP 10 (.39) 10 (.39)

If trim clips remain at the door side when the door trim is removed, improvise a tool (such as shown in the figure) to remove them.





## SERVICE POINTS OF INSTALLATION

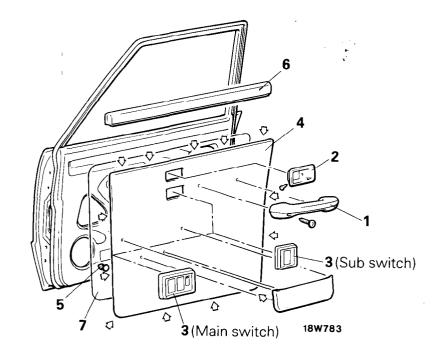
## 9. APPLICATION OF ADHESIVE TO WATERPROOF FILM

Apply a coating of specified adhesive to the position shown in the illustration, and then attach the waterproof film.

Specified adhesive: 3M ART Part No. 8626 or 3M

Adhesive EC-5310, or equivalent

# **REMOVAL AND INSTALLATION (Vehicles with a Power Window)**



#### Removal steps

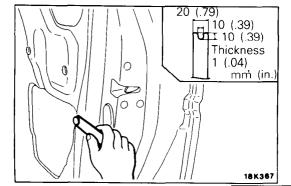
- 1. Armrest
- 2. Inside handle cover
- 3. Power window switch cover
- 4. Door trim

#### **\***

- 5. Trim clip
- 6. Door upper trim
- → 7. Waterproof film

#### NOTE

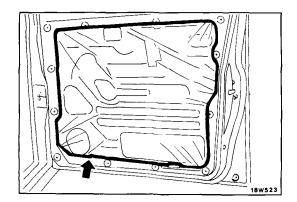
- (1) Reverse the removal procedures to reinstall.
- (4) 👌 : Clipping position



## **SERVICE POINTS OF REMOVAL**

## 5. REMOVAL OF TRIM CLIP

If trim clips remain at the door side when the door trim is removed, improvise a tool (such as shown in the figure) to remove them.



## SERVICE POINTS OF INSTALLATION

## 7. APPLICATION OF ADHESIVE TO WATERPROOF FILM

Apply a coating of specified adhesive to the position shown in the illustration, and then attach the waterproof

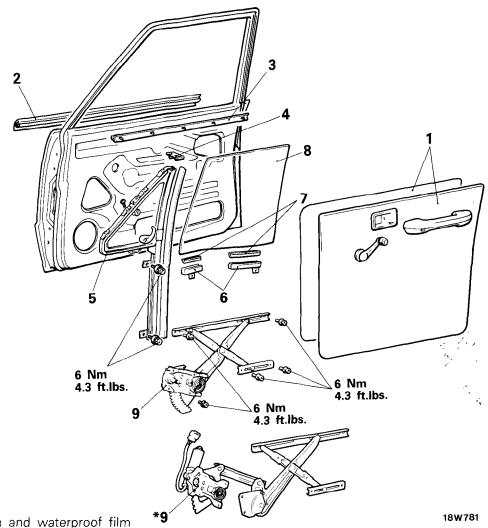
Specified adhesive: 3M ART Part No. 8626 or 3M

Adhesive EC-5310, or equivalent

# FRONT DOOR GLASS AND REGULATOR

REMOVAL AND INSTALLATION

N23MCAE



#### Removal steps

- 1. Door trim and waterproof film
  - Adjustment of door window glass
- 2. Outer weatherstrip
- 3. Inner weatherstrip
- 4. Center sash protector
- Adjustment of ventilator window assembly
- 5. Ventilator window assembly
  - 6. Glass holder
  - 7. Door glass pad
- 8. Door window glass

9. Window regulator

NOTE

- Reverse the removal procedures to reinstall.

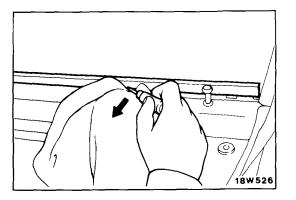
  The removal procedures to reinstall.

  Refer to "Service Points of Removal".

  Refer to "Service Points of Installation".
- \* : Vehicles with a power window

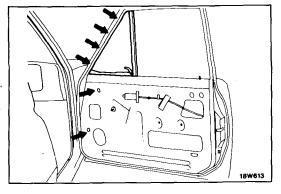
## SERVICE POINTS OF REMOVAL

1. REMOVAL OF DOOR TRIM AND WATERPROOF FILM Refer to P.23-33.



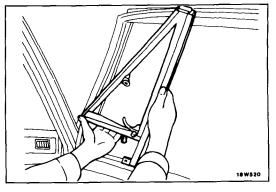
## 2. REMOVAL OF OUTER WEATHERSTRIP

- (1) Remove the outer weatherstrip from the fixing clips by prying upward with a screwdriver.
- (2) Remove the outer weatherstrip rearward.

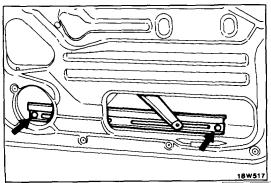


## 5. REMOVAL OF VENTILATOR WINDOW ASSEMBLY

(1) Remove the screws and bolts mounting the ventilator window assembly.



(2) Pull out the ventilator window assembly upward.



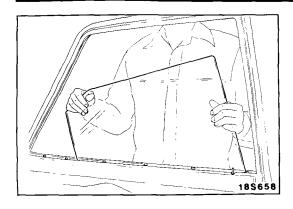
#### 8. REMOVAL OF DOOR WINDOW GLASS

- (1) Lower the door glass to the access hole position.
- (2) Peel the waterproof film off with care not to damage it.
- (3) Remove the glass mounting bolts from the glass holder.

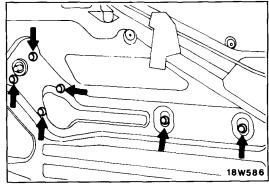
#### NOTE

When removing the glass mounting bolts, support the glass to avoid dropping it.

-



(4) Gently pull out the door glass upward while tilting it so that the rear end of the glass comes up to the top.



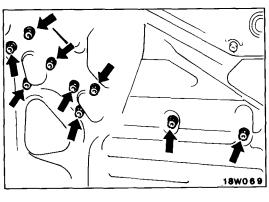
## 9. REMOVAL OF WINDOW REGULATOR Vehicles without a Power Window

(1) Remove the window regulator mounting bolts.

NOTE

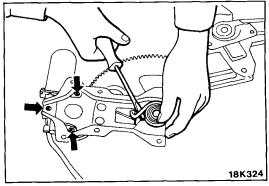
Hold the regulator assembly so that it does not drop off when bolts are removed.

(2) Take out the window regulator through the access hole.



#### Vehicles with a Power Window

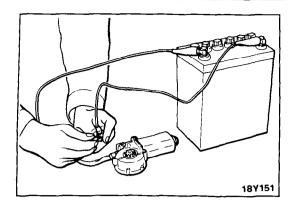
(1) Remove the regulator mounting bolts and nut, and then remove regulator from the access hole.



(2) Disconnect the power window motor from the regulator.

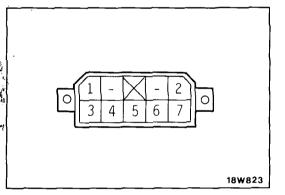
#### Caution

Because the force of the regulator spring may cause the regulator arm to jump up when the screws attaching the motor to the window regulator are removed, remove the regulator spring before removing the screws.



## INSPECTION POWER WINDOW MOTOR

- (1) Connect the motor terminals directly to the battery and check that the motor operates smoothly. Next, reverse the polarity and check that the motor operates smoothly in the reverse direction.
- (2) Check the circuit breaker incorporated in the motor, as described below, after installing the motor and regulator to the body.
  - ① Press the UP switch to fully close the window glass, and continue to press the switch for 10 to 20 seconds.
  - ② At the moment that the UP switch is released, press the DOWN switch. The circuit breaker can be considered good if at this time the door window glass begins to open within 60 seconds.



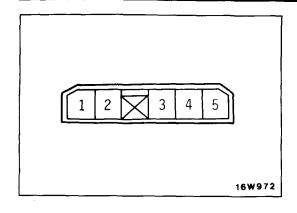
#### MAIN SWITCH

Operate the switch, and check the continuity between the terminals.

	Terminal		L.H.	side			R.H.	side		LC	CK
Switch		1	4	3	6	2	4	7	6	4	5
Power window switch (manual)	UP	0	-0	0~	0	0	0	0-	-0		
	OFF	0		0-	-0	0-		0	-0		
	DOWN	0—	0	-0	0	0	0—	-0	-0		
Lock switch	ON (LOCK)										
	OFF (FREE)									0	-0

#### NOTE

o→ indicates that there is continuity between the terminals.



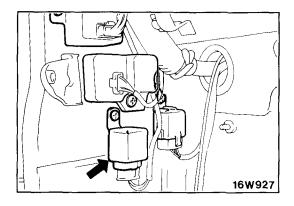
#### **SUB SWITCH**

Operate the switch, and check the continuity between the terminals.

Terminal Switch	2	1	5	4	3
UP	0	0	0		_0
OFF		0	0	0	0
DOWN	0	0-			

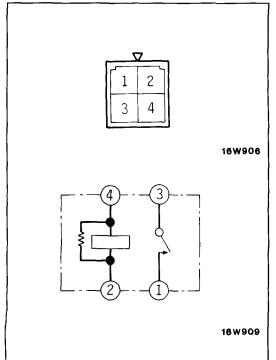
#### NOTE

O-O indicates that there is continuity between the terminals.



#### **POWER WINDOW RELAY**

(1) After removing the cowl side trim, remove the power window relay.



(2) Check for continuity between the terminal.

	Terminal	1	2	3	4
Battery voltage not applied			0-		-0
Battery voltage applied		<b>⊕</b>	0	Θ	0

#### NOTE

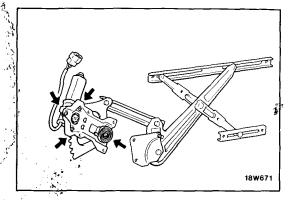
- (1) indicates that there is continuity between the terminals.
- (2)  $\oplus$ ---- $\ominus$  indicates the connection with the power supply.

#### SERVICE POINTS OF INSTALLATION

#### 9. INSTALLATION OF WINDOW REGULATOR

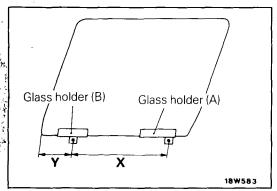
#### Vehicles without a Power Window

Apply a coating chassis grease to the sliding parts and rotating parts of the window regulator.



#### Vehicles with a Power Window

When assembling the window regulator and power window motor, first install the regulator spring, and then proceed with assembly.



#### 8. INSTALLATION OF DOOR WINDOW GLASS

When the door glass has been removed from the glass holder, install to the position shown in illustration.

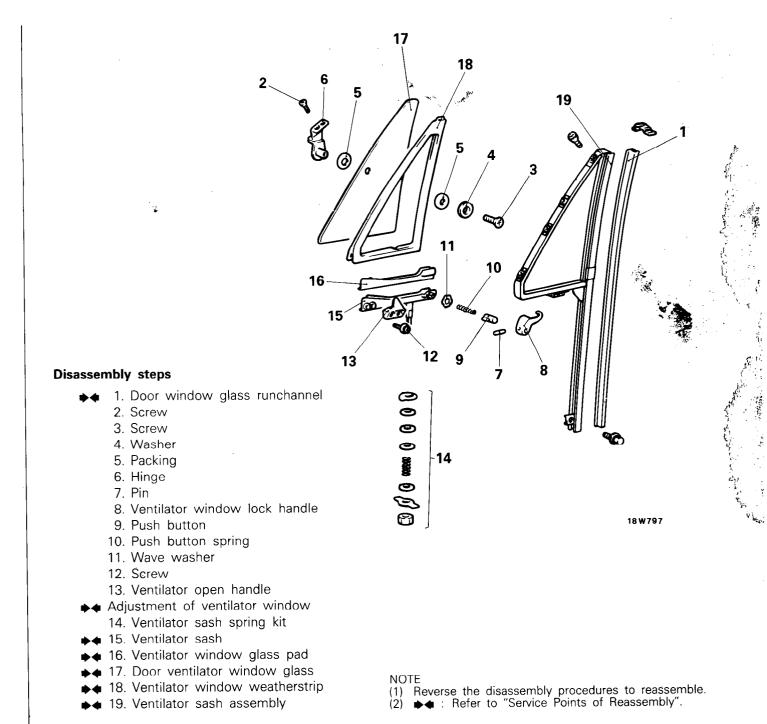
#### Standard value :

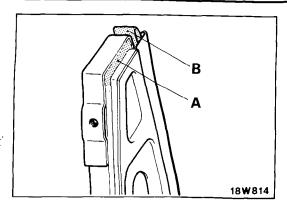
Distance X 466.5–467.5 mm (18.366–18.406 in.) Distance Y 76.5–77.5 mm (3.012–3.051 in.)

- ADJUSTMENT OF VENTILATOR WINDOW Refer to P.23-16.
- ADJUSTMENT OF DOOR WINDOW GLASS Refer to P.23-16.
- 1. INSTALLATION OF DOOR TRIM AND WATERPROOF

Refer to P.23-33, 34.

## DISASSEMBLY AND REASSEMBLY (Ventilator Window Assembly)





#### SERVICE POINTS OF REASSEMBLY

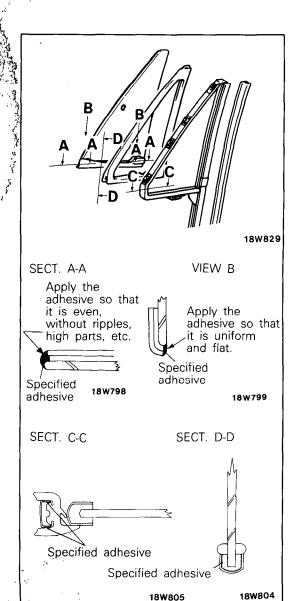
## 19.APPLICATION OF ADHESIVE TO VENTILATOR SASH ASSEMBLY/18, VENTILATOR WINDOW WEATHERSTRIP

(1) Apply the specified adhesive to the place marked "A" in the figure, between the ventilator sash assembly and the ventilator window weatherstrip.

Specified adhesive: 3M Super Weatherstrip Adhesive 8001 or 8011 or equivalent

(2) Apply the specified adhesive to the place marked "B" in the figure.

Specified adhesive: 3M ART Part No. 8080 or 3M Adhesive EC-1368, or equivalent



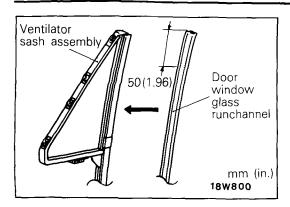
# 17. APPLICATION OF ADHESIVE TO DOOR VENTILATOR WINDOW GLASS/16. VENTILATOR WINDOW GLASS PAD/15. VENTILATOR SASH

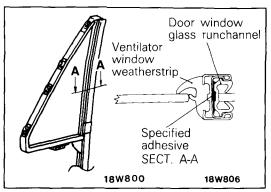
(1) The SECT. A-A and VIEW B parts in the illustration are to be coated with the specified adhesive.

Specified adhesive: 3M Super Weatherstrip Adhesive 8001 or 8011 or equivalent

(2) The SECT. C-C and SECT. D-D parts in the illustration are to be coated with the specified adhesive.

Specified adhesive: 3M ART Part No. 8080 or 3M Adhesive EC-1368, or equivalent





- ADJUSTMENT OF VENTILATOR WINDOW Refer to P.23-16.
- 1. APPLICATION OF ADHESIVE TO DOOR WINDOW GLASS RUNCHANNEL

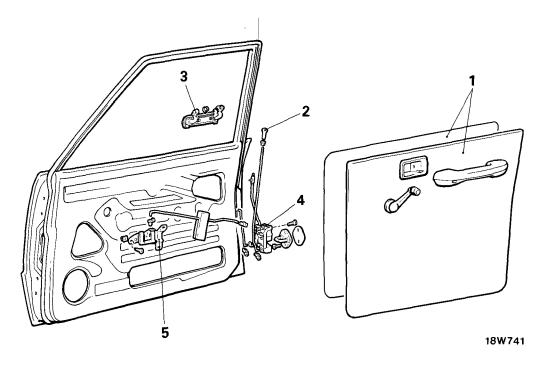
Apply the specified adhesive between the door window glass runchannel and the ventilator sash assembly at the location indicated in the illustration.

Specified adhesive: 3M ART Part No. 8080 or 3M Adhesive EC-1368, or equivalent

## DOOR HANDLE AND LATCH

## **REMOVAL AND INSTALLATION**

N23MDAD



#### Removal steps

- 1. Door trim and waterproof film
  - Adjustment of outside handle
  - Adjustment of inside handle
    - 2. Inside lock knob
    - 3. Outside handle
    - 4. Door latch
    - 5. Inside handle

#### NOTE

#### SERVICE POINTS OF REMOVAL

1. REMOVAL OF DOOR TRIM AND WATERPROOF FILM Refer to P.23-33.

#### SERVICE POINTS OF INSTALLATION

- ADJUSTMENT OF INSIDE HANDLE Refer to P.23-16.
- **ADJUSTMENT OF OUTSIDE HANDLE** Refer to P.23-16.
- 1. INSTALLATION OF DOOR TRIM AND WATERPROOF FILM

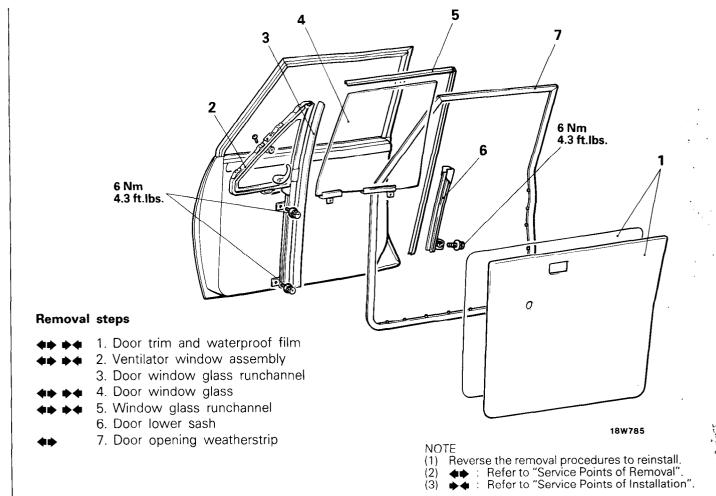
Refer to P.23-33, 34.

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## WINDOW GLASS RUNCHANNEL AND DOOR OPENING WEATHER-STRIP

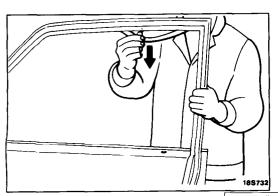
#### REMOVAL AND INSTALLATION

N23MEAD

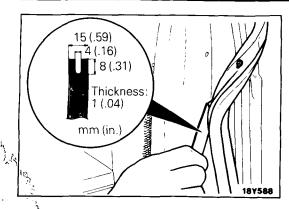


## **SERVICE POINTS OF REMOVAL**

- 1. REMOVAL OF DOOR TRIM AND WATERPROOF FILM Refer to P.23-33.
- 2. REMOVAL OF VENTILATOR WINDOW ASSEMBLY Refer to P.23-36.
- **4. REMOVAL OF DOOR WINDOW GLASS** Refer tto P.23-36.
- REMOVAL OF WINDOW GLASS RUNCHANNEL
   Remove the window glass runchannel by pressing both sides with your fingers.

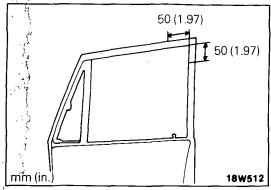


**STB Revision** 



7. REMOVAL OF DOOR OPENING WEATHERSTRIP

Remove the door opening weatherstrip with the tool shown in the illustration.



#### SERVICE POINTS OF INSTALLATION

5. APPLICATION OF ADHESIVE TO WINDOW GLASS RUN-CHANNEL

Apply the specified adhesive to the positions shown in illustration and install the window glass runchannel.

Specified adhesive: 3M Adhesive EC-870 or equivalent

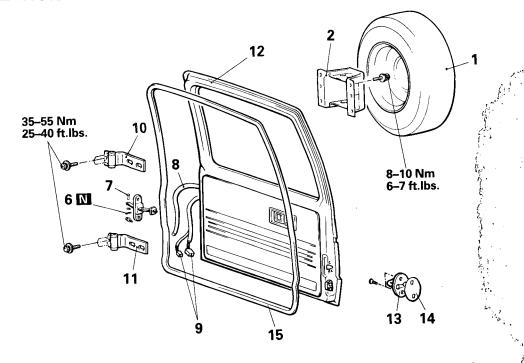
- **4. INSTALLATION OF DOOR WINDOW GLASS** Refer to P.23-40.
- 2. INSTALLATION OF VENTILATOR WINDOW ASSEMBLY Refer to P.23-35.
- 1. INSTALLATION OF DOOR TRIM AND WATERPROOF FILM

Refer to P.23-33, 34.

## **BACK DOOR ASSEMBLY**

#### REMOVAL AND INSTALLATION

N23OAAE



#### Back door removal steps

- 1. Spare tire
- 2. Spare tire carrier
  - 3. Rear opening trim
- 4. Quarter trim
- 5. Rear pillar lower trim
  - Adjustment of back door installation
    - 6. Cotter pin
    - 7. Clevis pin
    - 8. Connection of rear washer tube (Vehicles with a rear wiper)
    - 9. Connection of back door wiring harness connectors
  - 10. Door upper hinge
  - 11. Door lower hinge
    - 12. Back door

#### Striker removal steps

- 13. Striker
- 14. Striker shim

#### Door opening weatherstrip

**♦♦ ♦** 15. Door opening weatherstrip



### **SERVICE POINTS OF REMOVAL**

4. REMOVAL OF QUARTER TRIM

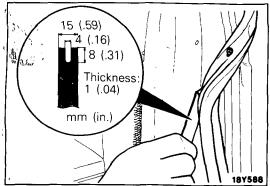
Refer to P.23-73.

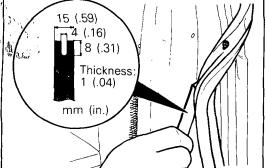
5. REMOVAL OF REAR PILLAR LOWER TRIM

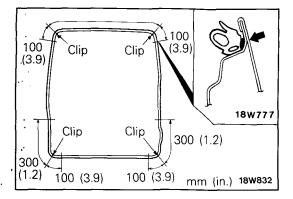
Refer to P.23-74.

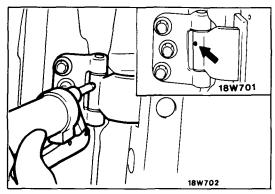
**STB Revision** 

18W793









#### 15. REMOVAL OF DOOR OPENING WEATHERSTRIP

Remove the door opening weatherstrip with the tool shown in the illustration.

#### SERVICE POINTS OF INSTALLATION

#### 15. APPLICATION OF ADHESIVE TO DOOR OPENING **WEATHERSTRIP**

Apply a coating of specified adhesive at the position shown in the illustration, and then attach the door opening weatherstrip.

Specified adhesive: 3M ART Part No. 8001 or No. 8011, or equivalent

#### 11. APPLICATION OF GREASE TO DOOR LOWER HINGE / 10. DOOR UPPER HINGE

Supply specified grease from the grease holes of the door hinges.

Specified grease: Multipurpose grease SAE J310, NLGI No. 3

NOTE

The nozzle of the grease gun should have a small-diameter tip.

ADJUSTMENT OF BACK DOOR INSTALLATION Refer to P.23-17.

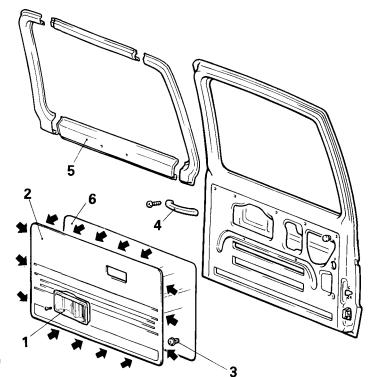
#### 2. INSTALLATION OF SPARE TIRE CARRIER

Refer to GROUP 22 WHEELS AND TIRES - Spare Tire Carrier.

## **BACK DOOR TRIM**

#### **REMOVAL AND INSTALLATION**

N23OBAB



#### Removal steps

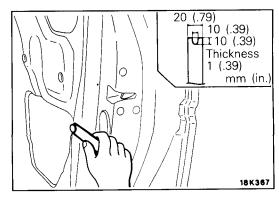
- 1. Inside handle cover
- 2. Back door trim

- 3. Trim clip
- 4. Armrest
- 5. Tailgate trim (metal top-van)
- 6. Waterproof film

#### NOTE

- Reverse the removal procedures to reinstall.
- ♣ : Refer to "Service Points of Removal".
   ♣ : Refer to "Service Points of Installation".
- : Clipping position

18W794



#### SERVICE POINTS OF REMOVAL

#### 3. REMOVAL OF TRIM CLIP

If trim clips remain at the door side when the back door trim is removed, improvise a tool (such as shown in the figure) to remove them.

### SERVICE POINTS OF INSTALLATION

#### 6. APPLICATION OF ADHESIVE TO WATERPROOF FILM

Apply specified adhesive at the positions shown in the illustration, and then attach the waterproof film.

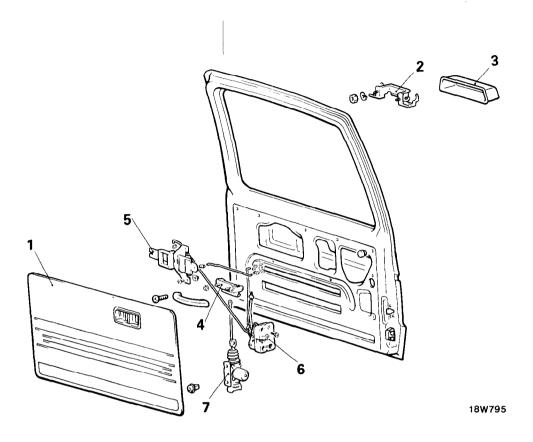
Specified adhesive: 3M ART Part No. 8626 or 3M Adhesive EC-5310, or equivalent

**STB Revision** 

## **BACK DOOR HANDLE AND LATCH**

#### REMOVAL AND INSTALLATION

N23OCAA

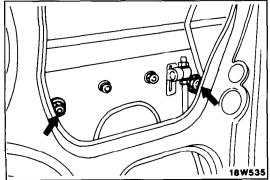


#### Removal steps

- 1. Back door trim and waterproof film
  - Adjustment of outside handle
- 2. Back door garnish bracket
  - 3. Back door garnish
    - 4. Outside handle
    - 5. Inside handle
- 6. Back door latch
- 7. Back door lock actuator

#### NOTE

- (1) Reverse the removal procedures to reinstall.
- Refer to "Service Points of Removal". Refer to "Service Points of Installation".



#### SERVICE POINTS OF REMOVAL

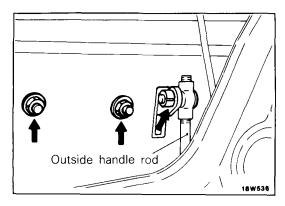
1. REMOVAL OF BACK DOOR TRIM AND WATERPROOF **FILM** 

Refer to P.23-49.

2. REMOVAL OF BACK DOOR GARNISH BRACKET/3. **BACK DOOR GARNISH** 

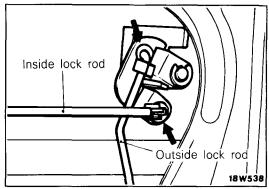
Remove the back door garnish installation nuts and bolts, and then remove the back door garnish.

STR Revision



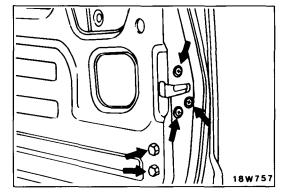
#### 4. REMOVAL OF OUTSIDE HANDLE

Disconnect the outside handle rod from the outside handle, and then remove the outside handle.

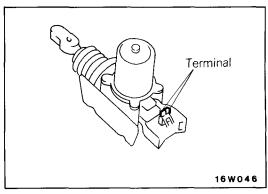


## 6. REMOVAL OF BACK DOOR LATCH/7. BACK DOOR LOCK ACTUATOR

- (1) Disconnect the outside lock rod and the inside lock rod from the lock cylinder.
- (2) Disconnect the actuator rod from the outside lock rod.



- (3) Remove the back door latch together with the rods.
- (4) Remove the back door lock actuator.



## INSPECTION BACK DOOR LOCK ACTUATOR

Connect the battery source to the actuator terminal, and check the shaft for operation. If the shaft moves in opposite direction when the connection polarity is changed, the actuator should be considered to be in normal condition.

#### SERVICE POINTS OF INSTALLATION

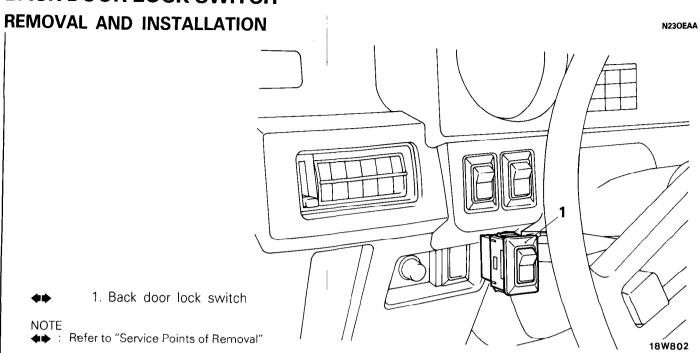
ADJUSTMENT OF OUTSIDE HANDLE

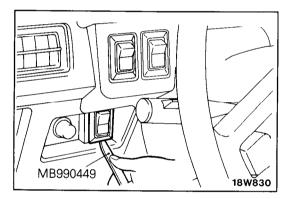
Refer to P.23-16.

1. INSTALLATION OF BACK DOOR TRIM AND WATER-PROOF FILM

Refer to P.23-49.

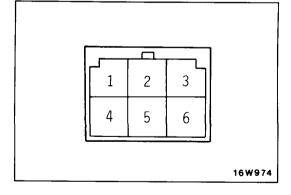
## **BACK DOOR LOCK SWITCH**





#### SERVICE POINTS OF REMOVAL

- 1. REMOVAL OF BACK DOOR LOCK SWITCH
- (1) Pry off the switch by using the special tool and pull out the switch from the meter hood.
- (2) Disconnect the connector from the back of the switch and take out the switch.



## INSPECTION BACK DOOR LOCK SWITCH

Operate the switch, and check the continuity between the terminals.

Terminal Position	5	6	3	2
UNLOCK	0	0-	-0	0
OFF	_			
LOCK	0		0-	0

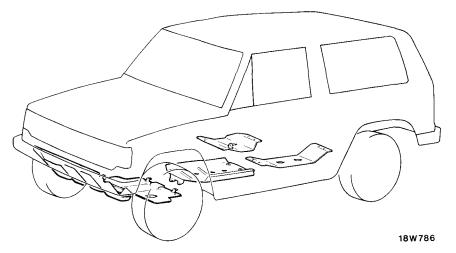
NOTE

O-O indicates that there is continuity between the terminals.

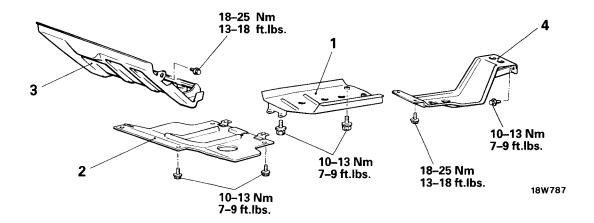
### **UNDER GUARD**

### **REMOVAL AND INSTALLATION**

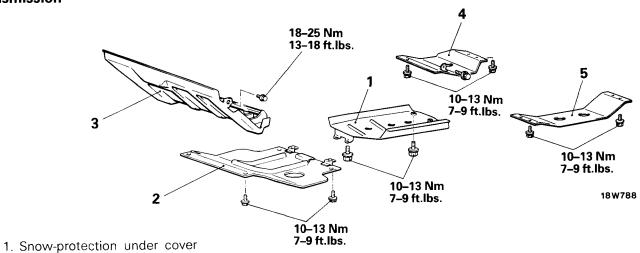
N23WAAA



## Vehicles with a manual transmission



## Vehicles with an automatic transmission

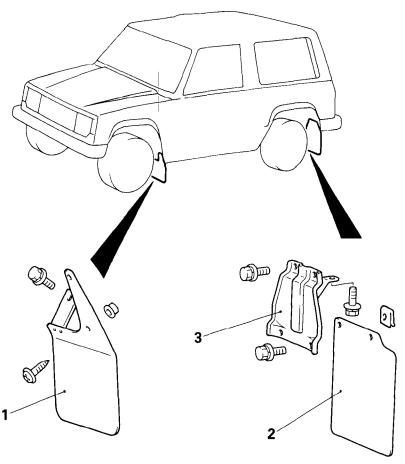


- 2. Under cover
- 3. Under skid plate
- 4. Transfer case protector
- 5. Cross shaft protector

## **MUD GUARD**

## **REMOVAL AND INSTALLATION**

N23WBAA



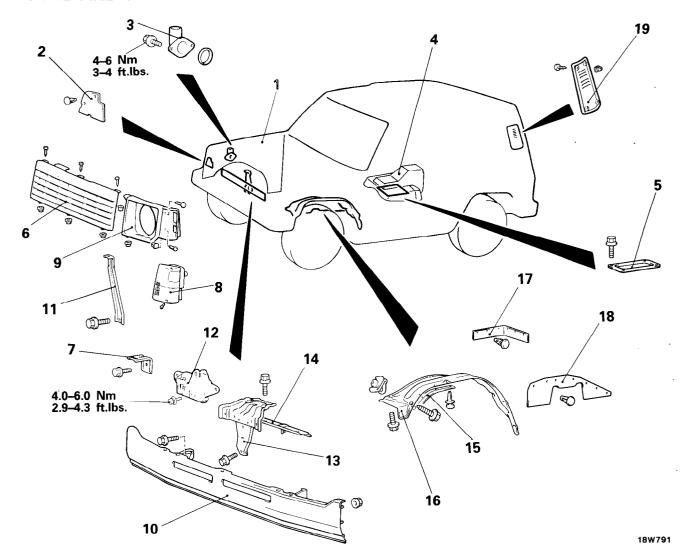
- Front mud guard
   Rear mud guard
   Mud guard bracket

18W779

#### **LOOSE PANEL**

#### REMOVAL AND INSTALLATION

N23SAAC



#### Waterproof pad and air duct removal steps

- 1. Front fender
  - 2. Waterproof pad
    - 3. Air duct

#### Front floor cover removal steps (Vehicles with a manual transmission)

- 4. Floor console
- 5. Front floor cover

#### Radiator grille bracket removal steps

- 6. Radiator grille
- 7. Radiator grille bracket

#### Bridge panel cover assembly removal steps

- 6. Radiator grille
- 8. Front combination light
- 9. Head light bezel
- 10. Grille filler panel assembly
- 11. Hood catch stay

- 12. Hood latch
  - 13. Hood catch bracket assembly
  - 14. Bridge panel cover assembly

#### Splash shield removal steps

- 15. Partial wheel lip
- ▶ 4 16. Splash shield

#### Shield rubbers

- 17. Shield rubber (Vehicles with an automatic transmission)
- 18. Shield rubber

#### Rear ventilator cover

19. Rear ventilator cover (Vehicles without a rear seat)

#### NOTE

- (1) Reverse the removal procedures to reinstall.
- Refer to "Service Points of Removal".
  Refer to "Service Points of Installation".

#### SERVICE POINTS OF REMOVAL

1. REMOVAL OF FRONT FENDER Refer to P.23-24.

4. REMOVAL OF FLOOR CONSOLE

Refer to P.23-67.

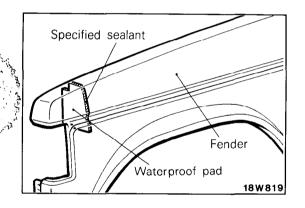
#### SERVICE POINTS OF INSTALLATION

16. INSTALLATION OF SPLASH SHIELD

Refer to P.23-24.

12. INSTALLATION OF HOOD LATCH

Refer to P.23-20.



#### 2. APPLICATION OF SEALANT TO WATERPROOF PAD

Apply the specified sealant to the places marked in the figure.

Specified sealant: 3M ART Part No. 8001 or No. 8011, or equivalent

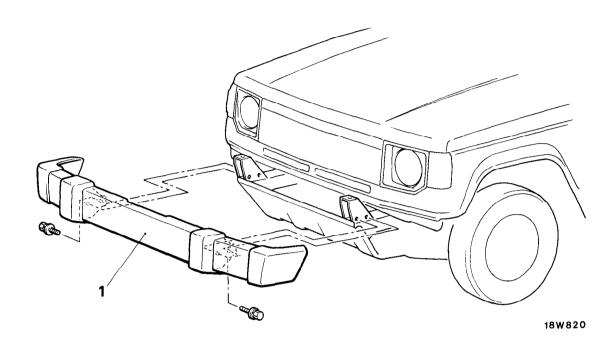
1. INSTALLATION OF FRONT FENDER

Refer to P.23-25.

## **BUMPERS**

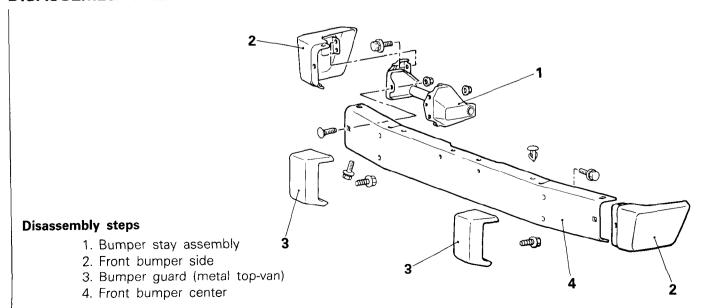
## **REMOVAL AND INSTALLATION (Front Bumper)**

N23ZBAB



1. Front bumper assembly

### **DISASSEMBLY AND REASSEMBLY**

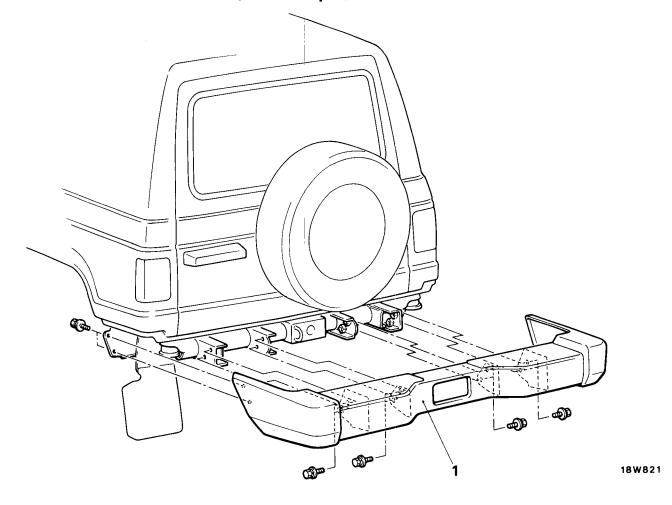


NOTE

Reverse the disassembly procedures to reassemble.

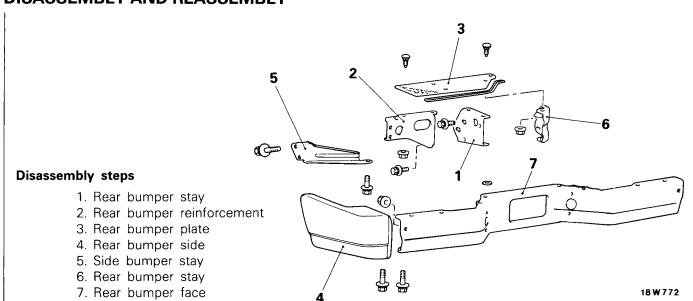
18W771

## **REMOVAL AND INSTALLATION (Rear Bumper)**



1. Rear bumper assembly

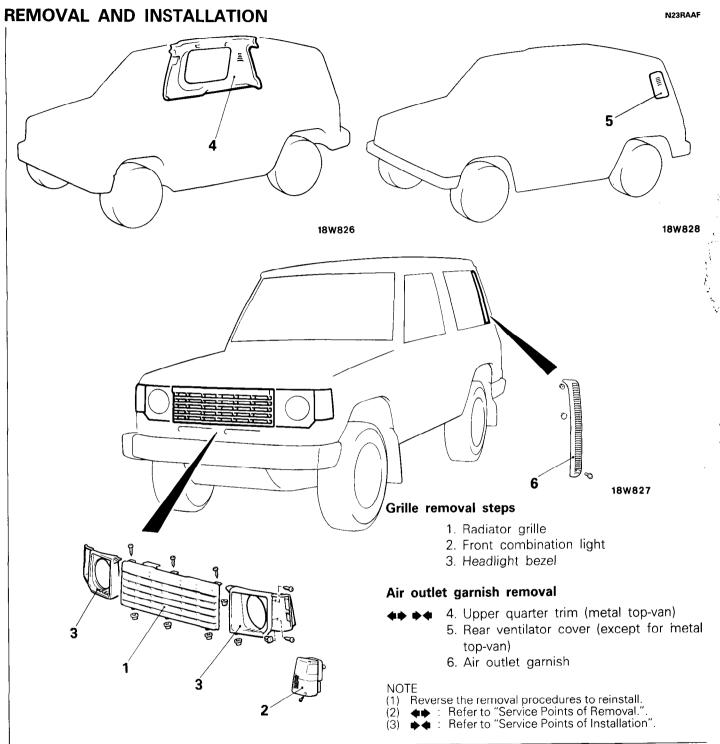
#### **DISASSEMBLY AND REASSEMBLY**



NOTE

Reverse the disassembly procedures to reassemble.

## **GRILLE, GARNISH**



#### **SERVICE POINTS OF REMOVAL**

**4. REMOVAL OF UPPER QUARTER TRIM** Refer to P.23-73.

#### SERVICE POINTS OF INSTALLATION

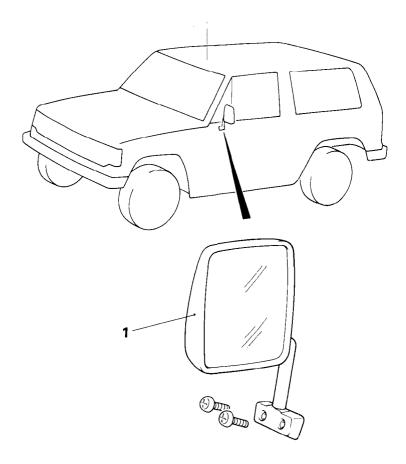
**4. INSTALLATION OF UPPER QUARTER TRIM** Refer to P.23-74.

The state of the s

## **OUTSIDE MIRROR**

## REMOVAL AND INSTALLATION

N23QBAB



1. Rearview mirror

18W789

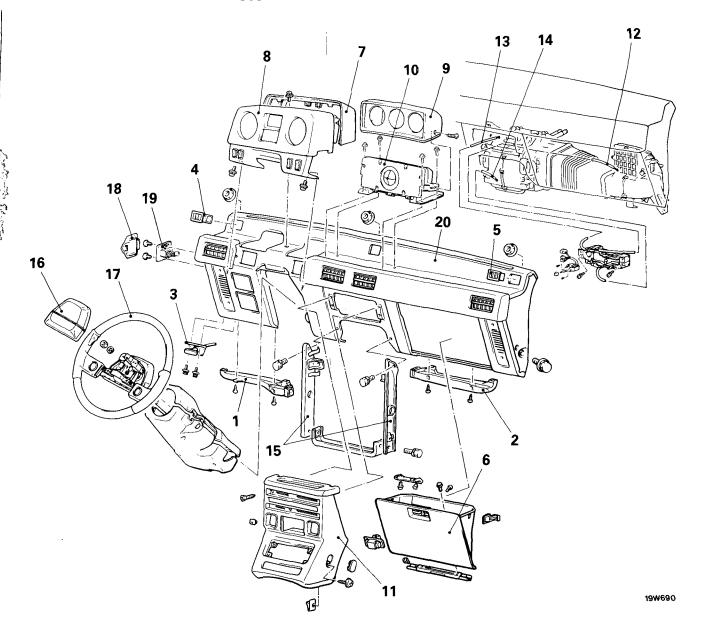
## **INSTRUMENT PANEL**

N23UAAE

For installation of the instrument panel, the bolts, screws and nut described below are used. They are indicated by symbols in the illustration in the section "SERVICE POINTS OF REMOVAL".

Symbol	Name and shape	Dimensions mm (in.)	Symbol	Name and shape	Dimensions mm (in.)
А	Washer assembled screw	O.D. = 6 (.24) L = 12 (.47)	F	Washer assembled bolt	O.D. = 6 (.24) L = 12 (.47)
	198654			19w651	
В	Tapping screw	O.D. = 5 (.20) L = 12 (.47)	G	Washer assembled bolt	O.D. = 6 (.24) L = 16 (.63)
	1840418		}	19W653	
С	Washer assembled screw	O.D. = 5 (.20) L = 12 (.47)	H	Washer assembled bolt	O.D. = 8 (.31) L = 20 (.79)
	() 19w654		<u>.</u>	198651	
D	Washer assembled screw	O.D. = 5 (.20) L = 16 (.63)	l	Washer assembled bolt	O.D. = 8 (.31) L = 20 (.79)
	198654			198655	
Е	Tapping screw	O.D. = 5 (.20) L = 16 (.63)	J	Nut ——/I	I.D. =8 (.31)
	19W652			U 19W656	

### **REMOVAL AND INSTALLATION**



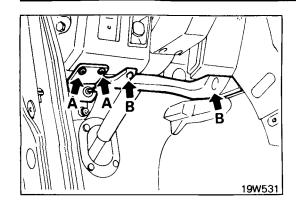
#### Removal steps

- 1. Lap heater duct (B)
  - 2. Lap heater duct (C)
- 3. Hood release cable bracket
- 4. Demister grille (L.H.)
- 5. Demister grille (R.H.)
- 6. Glove box
- 7. Meter cover
- 8. Meter case
- 9. Combination meter pad
- 10. Combination meter case
  - 11. Center panel

- 12. Connection of recirculation/fresh air changeover control wire
- 13. Connection of mode selection control
- 14. Connection of water valve control wire
- 15. Center reinforcement
  - 16. Horn pad
- 17. Steering wheel
  - 18. Fuse box cover
  - 19. Fuse box assembly
- 20. Instrument panel

#### NOTE

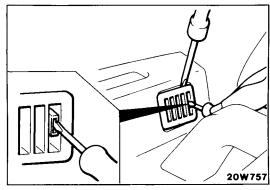
- Reverse the removal procedures to reinstall.
   ♠ : Refer to "Service Points of Removal".
   ♠ : Refer to "Service Points of Installation".



### SERVICE POINTS OF REMOVAL

## 1. REMOVAL OF LAP HEATER DUCT (B)/3.HOOD RELEASE CABLE BRACKET

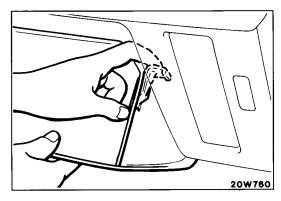
Remove the lap heater duct B and hood release cable bracket.



## 4. REMOVAL OF DEMISTER GRILLE (L.H.) /5. DEMISTER GRILLE (R.H.)

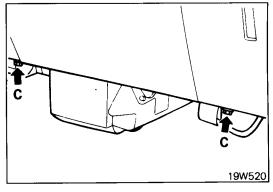
Remove the right and left demister grilles by raising the attaching projections with a screwdriver.

## Caution Use care not to break the projections.

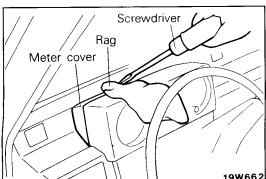


#### 6. REMOVAL OF GLOVE BOX

- (1) Remove the glove box stopper.
- (2) Remove side lap heater duct (C) on the assistant's seat.

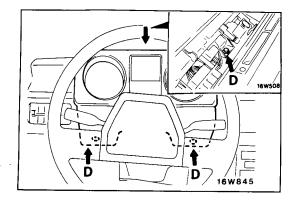


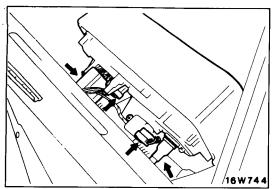
(3) Remove the glove box frame attaching screws from the instrument panel and remove the glove box.

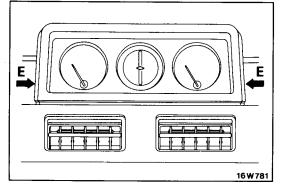


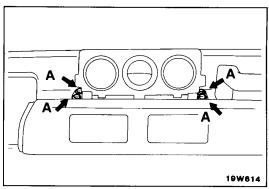
#### 7. REMOVAL OF METER COVER

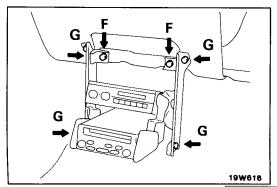
Remove the meter cover with a screwdriver.











#### 8. REMOVAL OF METER CASE

- (1) Remove the screws from the bottom of the case.
- (2) Remove the bolt from the upper part of the case.

- (3) Disconnect the speedometer cable from the meter case by pushing the stopper of the plug on the speedometer cable side of the connection.
- (4) Disconnect the connectors of the meter harness and also of the body harness.
- (5) Disconnect the connectors (all located behind the meter case at the bottom) of the hazard switch, the rear window defogger, rear fog lamp switch, electric tailgate locking switch, and the rear wiper/washer switch, and then remove the meter case.

#### 9. REMOVAL OF COMBINATION METER PAD

Remove the combination meter pad.

#### 10. REMOVAL OF COMBINATION METER CASE

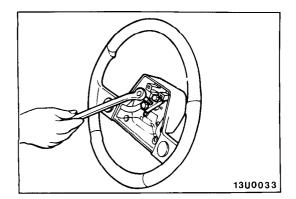
- (1) Remove the meter case attaching screws.
- (2) Disconnect the connectors of the meter harness located behind the meter case.

#### Caution

To prevent internal trouble, the meter must not be dropped or subjected to shock or must not be abruptly inclined to the extent that the maximum indication angle is exceeded.

#### 15. REMOVAL OF CENTER REINFORCEMENT

- (1) Remove the center console. (Refer to P.23-66.)
- (2) Remove the center reinforcement attaching screws.
- (3) Remove the center reinforcement, radio and car stereo player as a unit.
- (4) Disconnect the radio and car stereo player from the front harness and feader wire.



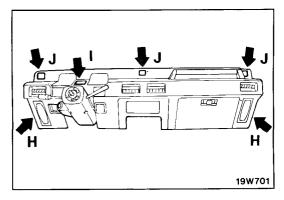
#### 17. REMOVAL OF STEERING WHEEL

N23UAAE

Remove the steering wheel.

#### NOTE

Before removal, make the mating marks on both steering shaft and steering wheel.



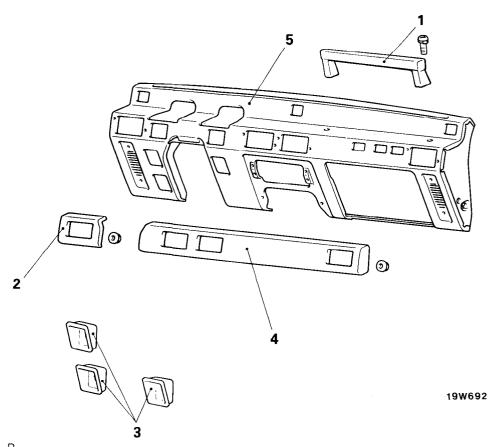
#### 20. REMOVAL OF INSTRUMENT PANEL

Remove the instrument panel attaching bolts and nuts, and withdraw and remove the instrument panel toward you.

## SERVICE POINTS OF INSTALLATION 20. INSTALLATION OF INSTRUMENT PANEL

- (1) Connect all of the connectors securely.
- (2) Make sure that any of the wiring harnesses are not pinched.

#### **DISASSEMBLY AND REASSEMBLY**



- 1. Assist grip
- 2. Instrument pad B
- 3. Switch holder
- 4. Instrument pad A
- 5. Instrument panel

### **CENTER CONSOLE**

## REMOVAL AND INSTALLATION

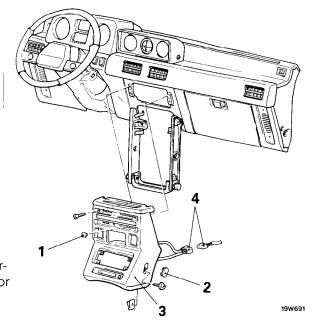
N23UBAD



- 1. Knob
- 2. Plug
- 3. Center panel
- 4. Connection of center panel wiring harness to front wiring harness, connector

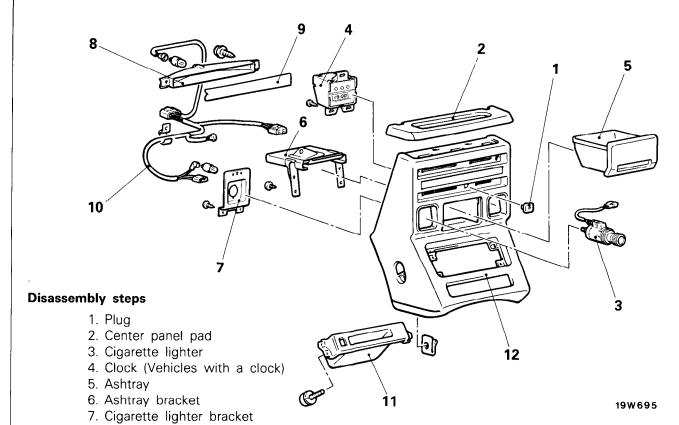
NOTE

Reverse the removal procedures to reinstall.



## **DISASSEMBLY AND REASSEMBLY**

N23UBAE



ox panel

11. Box panel

12. Center panel

8. Lamp holder

9. Heater control panel10. Center panel wiring harness

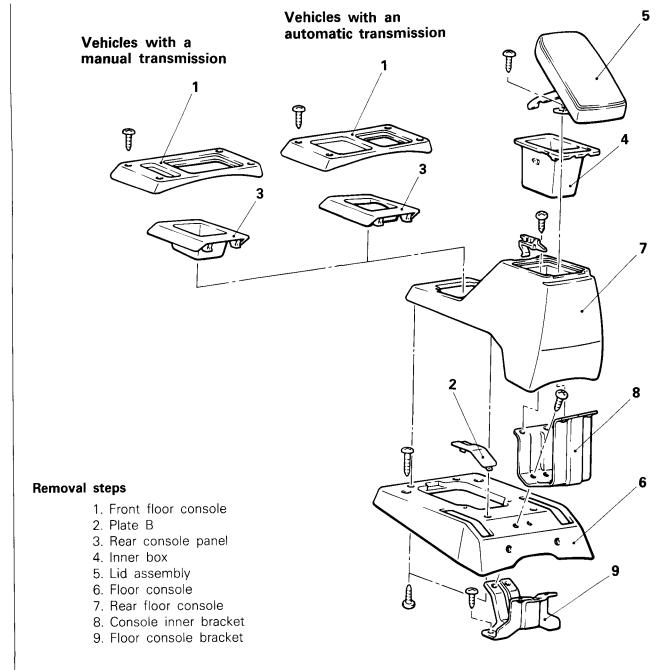
NOTE

Reverse the disassembly procedures to reassemble.

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## **FLOOR CONSOLE**

#### **REMOVAL AND INSTALLATION**



NOTE

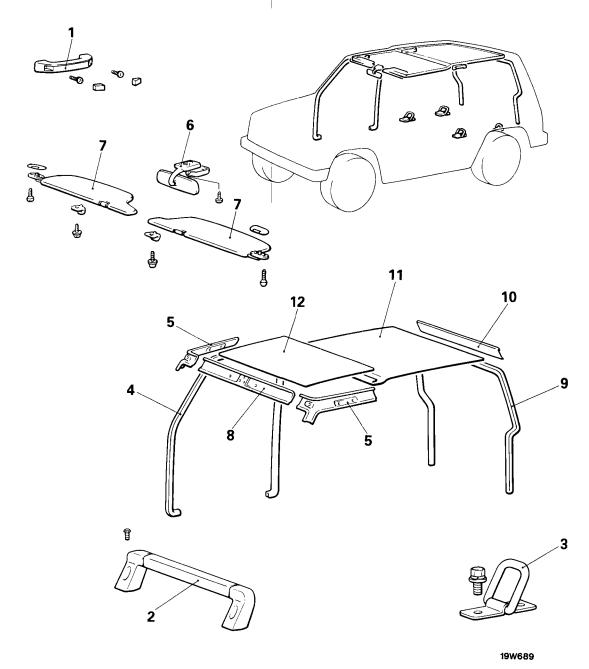
Reverse the removal procedures to reinstall.

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## **HEADLINING AND ASSIST STRAP**

## **REMOVAL AND INSTALLATION**

N23UDAF



#### Assist strap

- 1. Assist strap
- 2. Assist grip
- 3. Hook

- 10. Rear roof rail trim (metal top-van)
- 11. Rear headlining
- 12. Front headlining

#### Headlinings removal steps

- 1. Assist strap
- 4. Door opening 'trim
- 5. Front side roof rail trim (metal top-van)
  - 6. Inside rear view mirror
  - 7. Sun visor
- 8. Front roof rail trim (metal top-van)
  - 9. Rear opening trim

#### NOTE

- Reverse the removal procedures to reinstall.

  Refer to "Service Points of Removal".

  Refer to "Service Points of Installation".

#### **SERVICE POINTS OF REMOVAL**

#### 5. REMOVAL OF FRONT SIDE ROOF RAIL TRIM

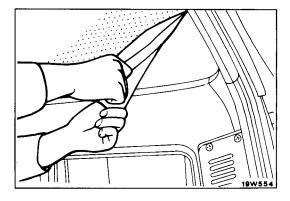
Refer to P.23-72.

#### 8. REMOVAL OF FRONT ROOF RAIL TRIM

Refer to P.23-72.

#### 10. REMOVAL OF REAR ROOF RAIL TRIM

Refer to P.23-73.



#### 11. REMOVAL OF REAR HEADLINING/12. FRONT HEADLIN-ING

- (1) Remove the dome light.
- (2) Slowly peel the headlining away, beginning with the corner of the roof panel.

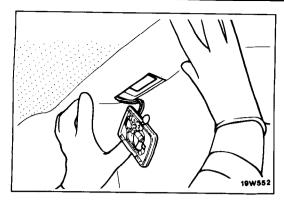
#### Caution

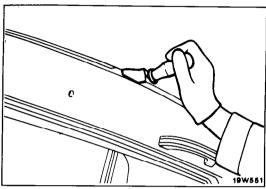
Make sure that the headlining is removed slowly; as the sponge portion of the headlining is left behind on the roof panel.

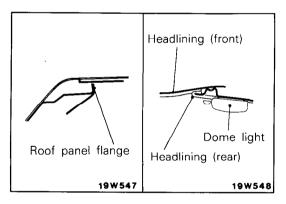
(3) Thoroughly remove the drying sealant and sponge left behind on the roof panel by using a toluol solution, etc.

#### Caution

Make sure that all remaining sealant and sponge are thoroughly removed, as they produce uneven surfaces when the headlining is bonded to the roof panel.







# SERVICE POINTS OF INSTALLATION 12.APPLICATION OF SEALANT TO FRONT HEADLINING/ 11.REAR HEADLINING

(1) Evenly apply the specified sealant to the roof panel. When the headlining (rear) is installed, couple the room dome light connector, put it through the cut hole in the lining, and bond the lining so that the lining cut hole matches the dome light attaching hole.

Specified sealant: 3M ART Part No. 8080 or 3M Adhesive EC-1368, or equivalent

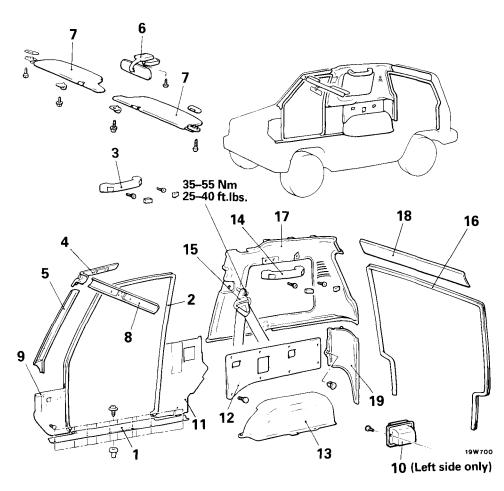
(2) Using care to prevent wrinkles and slackness, bond the headlining and insert the edges securely into the roof panel flange by using a spatula, etc.

(3) Bond the headlining edges as shown.

#### **TRIMS**

#### REMOVAL AND INSTALLATION

N23UCAF



#### Front pillar trim and roof rail trim removal steps

- 1. Front scuff plate
- 2. Door opening trim
- 3. Assist grip
- 4. Front side roof rail trim
- 5. Front pillar trim (metal top-van)
  - 6. Inside rear view mirror
  - 7. Sun visor
- 8. Front roof rail trim

#### Cowl side trim removal steps

- 1. Front scuff plate
- 2. Door opening trim
- 9. Cowl side trim

#### Center pillar trim removal steps

- 1. Front scuff plate
- 2. Door opening trim
- 10. Ashtray (metal top-van)
- 11. Center Pillar trim

#### Quarter trim removal steps

- 10. Ashtray (metal top-van)
- 12. Quarter trim

#### Rear wheelhouse trim

♠★ ◆♠ 13. Rear wheelhouse trim (metal top-van)

#### Upper quarter trim removal steps

- 2. Door opening trim
- 12. Quarter trim
- 14. Assist grip
- 15. Front seat belt anchor plate
- 16. Rear opening trim
- 🛊 17. Upper quarter trim (metal top-van)

#### Rear roof rail trim

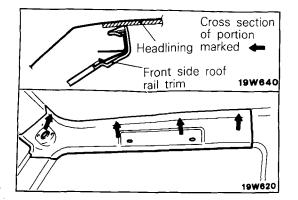
18. Rear roof rail trim

#### Rear pillar lower trim removal steps

- 12. Quarter trim
- 16. Rear opening trim
- 19. Rear pillar lower trim (metal top-van)

#### NOTE

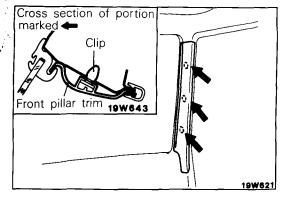
- Reverse the removal procedures to reinstall.
- Refer to "Service Points of Removal".
  Refer to "Service Points of Installation".



#### SERVICE POINTS OF REMOVAL

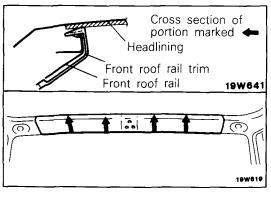
#### 4. REMOVAL OF FRONT SIDE ROOF RAIL TRIM

Remove the front side roof rail trim



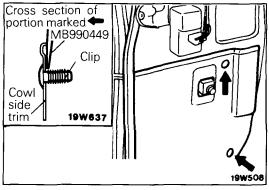
#### 5. REMOVAL OF FRONT PILLAR TRIM

Remove the front pillar trim.



#### 8. REMOVAL OF FRONT ROOF RAIL TRIM

Remove the front roof rail trim



#### 9. REMOVAL OF COWL SIDE TRIM

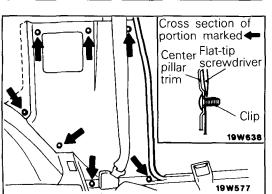
- (1) Insert a special tool under the cowl side trim and remove the clips.
- (2) Remove the cowl side trim.

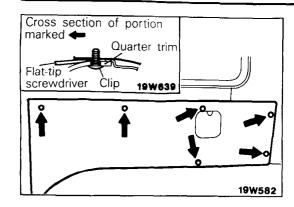
#### 11. REMOVAL OF CENTER PILLAR TRIM

- (1) On vehicles with cassette stereo player, remove the rear speaker. (Refer to GROUP 8 ELECTRICAL-Radio and Stereo.)
- (2) Remove the clips at two places (upper and lower) at the foremost part of the quarter trim.
- (3) Insert the tip of a flat-tip (-) screwdriver or similar tool beneath the center pillar trim and cut the top part of the clips.



When cutting the clips, be careful not to scratch the body panel.





#### 12. REMOVAL OF QUARTER TRIM

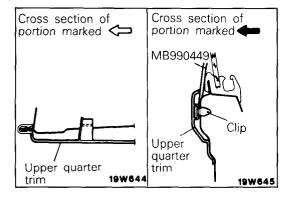
Insert the tip of a flat-tip (-) screwdriver or similar tool beneath the quarter trim and cut the top part of the clips.

#### NOTE

When cutting the clips, be careful not to scratch the body panel.

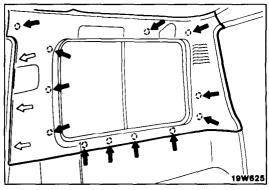
#### 13. REMOVAL OF REAR WHEELHOUSE TRIM

- (3) Remove the rear seat. (Rear to P.23-77.)
- (2) Remove the hooks and the rear wheelhouse trim.



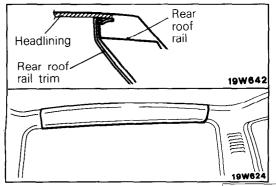
#### 17. REMOVAL OF UPPER QUARTER TRIM

- (1) Insert the special tool under the upper quarter trim and remove the clips.
- (2) Remove the upper quarter trim.



#### 18. REMOVAL OF REAR ROOF RAIL TRIM

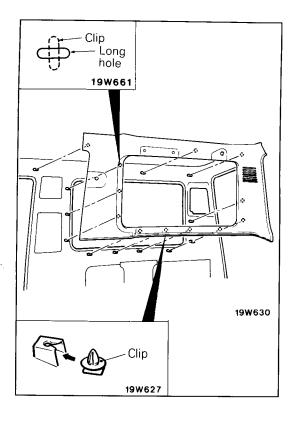
Remove the rear roof rail trim.



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#### 19. REMOVAL OF REAR PILLAR LOWER TRIM

- (1) Remove the clips at 2 places at the rear part of the quarter trim and the 2 clips at the rear pillar part of the upper quarter trim.
- (2) Remove the clip to remove the rear pillar lower trim.

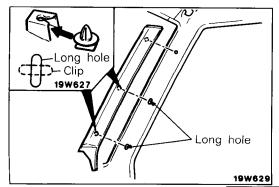


## SERVICE POINTS OF INSTALLATION 17. INSTALLATION OF UPPER QUARTER TRIM

When attaching clips to the upper quarter trim, attach so that the clip is at a right angle relative to the long hole of the body panel.

#### 13. INSTALLATION OF REAR WHEELHOUSE TRIM

Install the rear wheelhouse trim with the cargo floor mat on top of it.



#### 5. INSTALLATION OF FRONT PILLAR TRIM

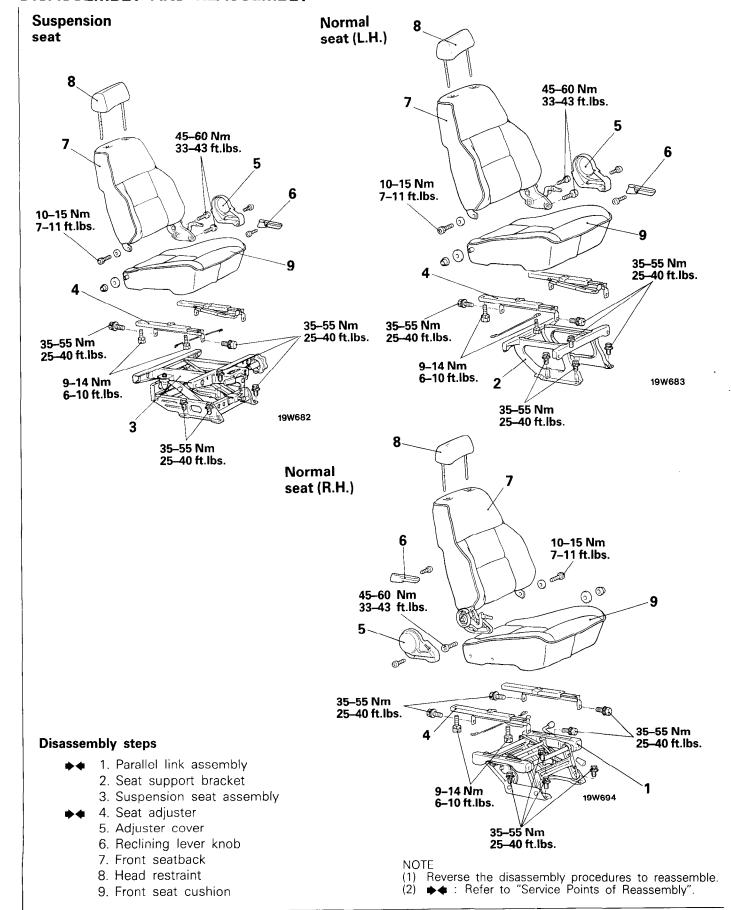
When attaching clips to the front pillar trim, attach so that the clip is at a right angle relative to the long hole of the front pillar.

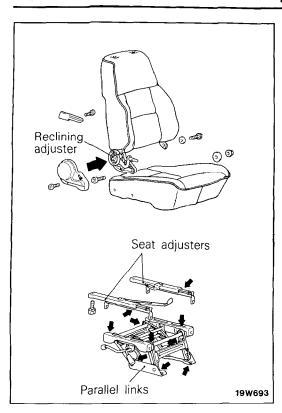
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### **FRONT SEATS**

### **DISASSEMBLY AND REASSEMBLY**

N23UEAD





#### SERVICE POINTS OF REASSEMBLY

- 4. APPLICATION OF GREASE TO SEAT ADJUSTER/1. PAR-ALLEL LINK ASSEMBLY
  - (1) Apply the specified grease to the following points.

Specified grease: Multipurpose grease SAE J310, NLGI No. 2

- Sliding parts of seat adjusters
- ② Sliding parts of parallel links
- Sliding parts of reclining adjusters
- (2) After the seat has been installed, check to ensure that the seat adjusters lock at all lock positions when the seatback is moved slowly.
- (3) Check to ensure that the forward folding and return mechanisms of the parallel links operate smoothly and lock securely.

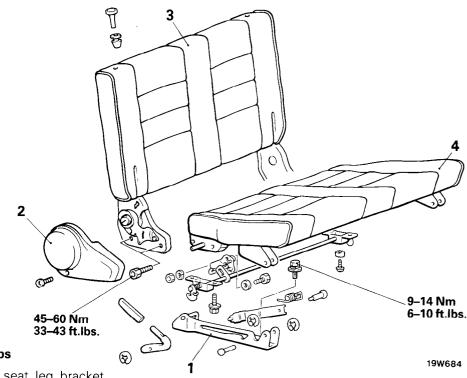
#### INSPECTION

- Check the springs for damage and deterioration.
- Check the shock absorber for noise and fluid leaks.
- Check the all tightened points for looseness.
- Check the rollers for noise and damage.
- Check the links for cracks, bending or dents.
- Check the body weight adjusting handle for bends, damage or looseness.
- Check the lock lever for bends and damage.
- Check the damper rubber for cracks and damage.

### **REAR SEAT**

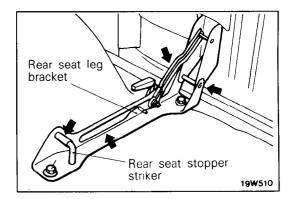
### **DISASSEMBLY AND REASSEMBLY**

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- Disassembly steps
  - 1. Rear seat leg bracket
    - 2. Reclining cover
    - 3. Rear seatback
    - 4. Rear seat cushion

#### NOTE



#### SERVICE POINTS OF REASSEMBLY

- 1. APPLICATION OF GREASE TO REAR LEG BRACKET
- (1) Apply the specified grease to the following place.

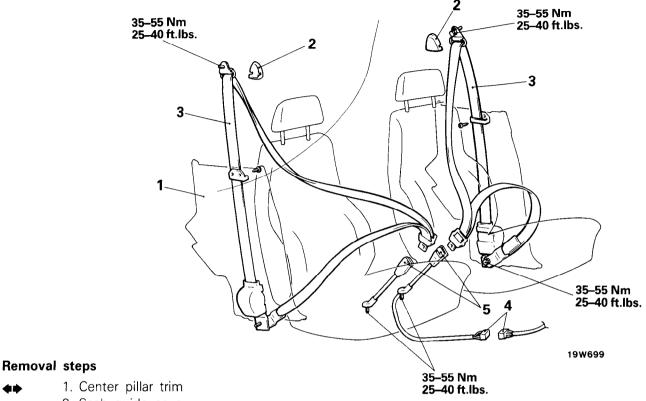
#### Specified grease: Multipurpose grease SAE J310, NLGI No. 2

- ① Sliding part of rear seat leg bracket
- ② Contacting part of rear seat stopper striker
- (2) After the seat has been installed, check to ensure that the lock release, forward-down, folding and return mechanisms all operate smoothly.
- (3) Check to ensure that when the seat cushion is folded, the leg bracket locks securely.

### **SEAT BELTS**

## REMOVAL AND INSTALLATION (Front seat belts)

N23LIGAD



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- 2. Sash guide cover

- 3. Front seat belt assembly
- 4. Connection of seat belt switch connec-
- 5. Buckle stalk

NOTE

- (1) Reverse the removal procedures to reinstall.
  (2) Refer to "Service Points of Removal".
  (3) Refer to "Service Points of Installation".

#### **SERVICE POINTS OF REMOVAL**

#### 1. REMOVAL OF CENTER PILLAR TRIM

Refer to P.23-72.

#### 3. REMOVAL OF FRONT SEAT BELT ASSEMBLY

Caution

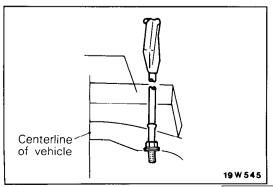
Special bolts (1-in. bolts) are used for the seat belt mounting bolts.

Do not disassemble the retractor.

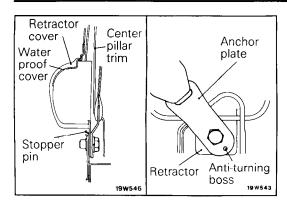
## SERVICE POINTS OF INSTALLATION

#### 5. INSTALLATION OF BUCKLE STALK

Install the seat belt buckle stalk in parallel with the center line of the vehicle.



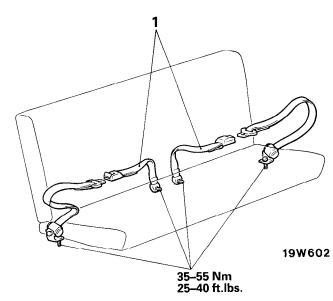
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### 3. INSTALLATION OF FRONT SEAT BELT ASSEMBLY

- (1) Fit the anti-rotation stopper pin of the webbing into the hole of the side sill.
- (2) Fit the anchor plate anti-turning boss positively in the retractor side hole and jointly tighten the retractor and anchor plate.

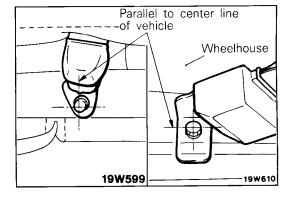
### **REMOVAL AND INSTALLATION (Rear seat belts)**



◆ 1. Rear seat belt

#### NOTE

- (1) Reverse the removal procedures to reinstall.
- 2) ▶♠: Refer to "Service Points of Installation".



### SERVICE POINTS OF INSTALLATION

#### 1. INSTALLATION OF REAR SEAT BELT

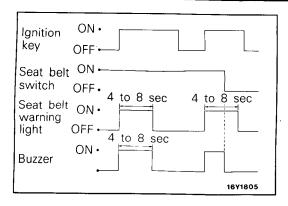
Position the anchor plates at the center of the vehicle so that the belts are parallel to the vehicle center line, and then secure the plates with the bolts.

#### NOTE

After tightening the bolts, securely mount the anchor covers for the inner end of the seat belts.

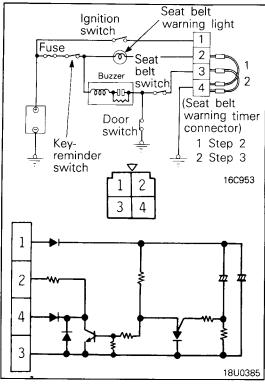
#### Caution

Special bolts (1-in. bolts) are used for the seat belt mounting bolts.



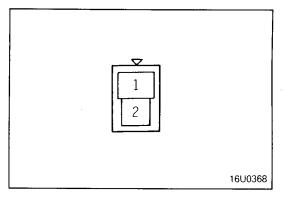
#### **SEAT BELT WARNING SYSTEM**

When the seat belt switch in ON (seat belts not buckled) with the ignition key in the ON position, the seat belt warning timer causes the seat belt warning light to illuminate and the buzzer to sound for 4 to 8 seconds. If the seat belts switch is set to OFF (the seat belts buckled) during the seat belt warning timer interval, only the buzzer is cancelled.



#### SYSTEM INSPECTION

- 1. Disconnect the seat belt warning timer connector.
- 2. When the YG wire (terminal 2) and B wire (terminal 3) are connected with a jumper wire, the seat belt warning light should illuminate. If it fails to illuminate, check the bulb, key-reminder switch and fuse.
- 3. Also the buzzer should sound when the RB wire (terminal 4) and B wire (terminal 3) are connected with a jumper wire. In this condition, fasten the buckle; if the buzzer stops sounding, the seat belt switch is good.



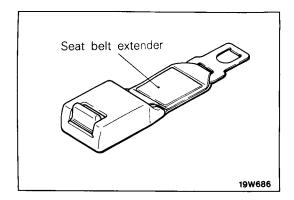
4. If the buzzer does not sound when terminal 3 and terminal 4 are connected with a jumper wire, check continuity of the seat belt switch. If there is continuity in the seat belt switch, replace the buzzer.

Terminal	1	2
Buckle unlock	0	
Buckle lock		

#### NOTE

O—O indicates that there is continuity between the terminal.

- 5. After performing the above inspections, reconnect the seat belt warning timer.
- 6. With the ignition switch turned to IG, verify the function of the seat belt warning system.



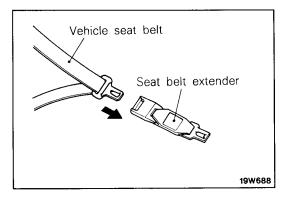
#### **SEAT BELT EXTENDER**

The seat belt extender as described below will provide additional seat belt length that the vehicle seat belt is not long enough for a person.

Seat belt extender	
Туре	В
Part number	MB544777

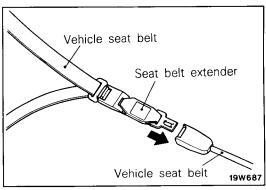
#### Caution

- The seat belt extender is intended for use only when the seat belt is not long enough to fit around an occupant. It must be removed and stowed when not required by that occupant.
- 2. Incorrect use of seat belt extender or other extender which is not specified may result in serious injury.



#### SEAT BELT EXTENDER INSTRUCTIONS

1. To use the extender, insert and latch the tip of the vehicle seat belt in the buckle of the extender.



2. The tip of the extender is then inserted and latched in the buckle end of the vehicle seat belt.